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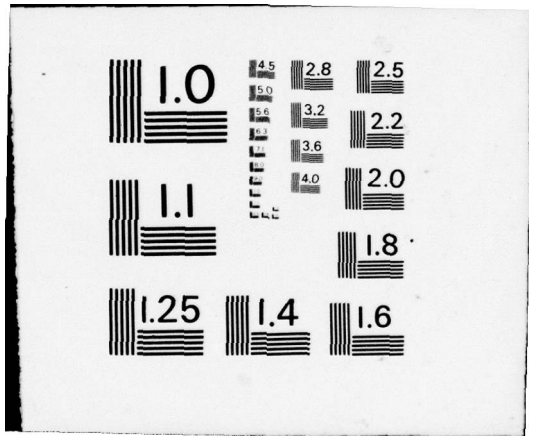
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BUREAU OF SOCIAL SCIENCE RESEARCH, INC.

WASHINGTON, D. C.

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(9) Report of a Pilot Study ~~the~~ rept.,

(6) ATTITUDES AND BEHAVIOR OF NAVAL PERSONNEL CONCERNING ALCOHOL AND PROBLEM DRINKING.

Conducted for

U.S. NAVY DEPARTMENT
Bureau of Naval Personnel

APPROVED FOR PUBLIC RELEASE
-DISTRIBUTION UNLIMITED

(12) 152p.

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Washington, D.C. 20036

(11) 28 February 28, 1973

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FOREWORD

This pilot study was conducted in the Fall of 1972 at the request of the Alcohol Abuse Control Program, Bureau of Naval Personnel, to provide information for the planning of preventive and treatment programs relevant to problem drinking among Naval personnel. This initial study, involving the measurement of attitudes and behavior concerning drinking and problem drinking among 1603 officers and enlisted men at four Naval establishments on the West Coast or in the Pacific, had three principal objectives:

1. The selection of a final method of data gathering for a projected large-scale Navy-wide survey. Prior to this pilot survey there had been no solid evidence as to whether large-scale mail surveys among military personnel on sensitive issues such as drinking problems would yield adequate returns and valid responses, or whether it would be necessary to utilize traveling field crews to draw samples and administer questionnaires to military personnel at their own stations. This pilot study was designed primarily as an experiment to resolve this methodological issue.

2. The pilot-testing of various types of content and methods of presentation of issues concerning the sensitive topics of drinking behavior, drinking problems, and opinions about the extent of problem drinking among Naval personnel.

3. The gathering of preliminary data on the prevalence of various types of problems related to drinking, on attitudes concerning the prevalence of problem drinking in the Navy, and on

opinions as to how to deal with problem drinking in the Navy. While the pilot survey dealt with only four localities, we feel that the preliminary findings will provide information of value in interim program planning prior to the completion of a final large-scale Navy-wide survey. The four localities in the pilot survey were chosen to represent a range of conditions believed relevant to the incidence of drinking problems, such as relative deprivation, relative availability of recreational facilities, and differences in opportunities for heavy drinking.

Methods

The survey was administered by a trained field team from the Bureau of Social Science Research, aided by liaison officers from Bureau of Naval Personnel and the local commands visited. The four sites covered were Guam, Yokosuka, San Diego, and NAS Whidbey Island (Washington). At each site, approximately equal samples of officers and enlisted men filled in self-administered questionnaires delivered to them through two alternative methods: to be returned by mail (with mail follow-up in event of nonresponse), or by on-site briefings and administration of questionnaires by a field worker. Full details on the conduct of this controlled field experiment are presented in Chapter II.

Measurement of Attitudes and Behavior About Drinking Problems

This pilot study included essentially the same types of questions and definitions of alcohol-related problems as used in recent nation-wide civilian surveys, thus providing a basis for comparisons

between civilians and Naval personnel when the final Navy-wide study is conducted. The scales for measurement of civilian drinking problems, reported in the First Report to Congress on Alcohol and Health by the Secretary of the Department of Health, Education, and Welfare of a year ago,[1] and in the recent monographs Problem Drinkers[2] and Problem Drinking Among American Men[3] were augmented in this Navy pilot study by a number of items designed to measure the degree to which excessive use of alcohol has had an adverse effect on the duty performance of Naval personnel. Details of these scales of drinking problems are discussed in Chapter III and in Appendix B.

We wish to express appreciation for the helpful counsel provided by Captain James A. Baxter, U.S. Navy, Director of the Alcohol Information Center and by Commander Robert L. Scarborough, Jr., U.S. Navy and Lieutenant (junior grade) Anthony W. Leggitt, U.S. Naval Reserves of the Progress and Evaluation Branch of the Human Resources Development Project in the Bureau of Naval Personnel; and for the indispensable assistance of Lieutenant (junior grade) Leggitt and Hospital Corpsman (Third class) Gregory J. Hannan, U.S. Navy, and local liaison officers in the field work at the four localities covered in this survey.

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[1]Department of Health, Education, and Welfare Publication No. (HSM) 72-9099, Washington, December 1971.

[2]Don Cahalan, Problem Drinkers, Jossey-Bass, San Francisco, 1970.

[3]Don Cahalan and Robin Room, Problem Drinking Among American Men, Monograph No. 7, Rutgers Center of Alcohol Studies, Rutgers University, 1972.

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CHAPTER I

SUMMARY OF FINDINGS

Comparisons of Findings with Mail and Field-Administered Questionnaires (Chapter IV)

The principal purpose of this pilot study was to conduct a controlled experiment to see which of two methods of administration of questionnaires can be expected to yield the best combination of high response rates, validity of responses (as inferred from a relatively high rate of admission of heavy drinking and drinking problems), sampling efficiency, and cost. The by-mail method was found to be preferable to the on-site-administered method, and is being recommended for use in large-scale quantitative surveys of drinking practices among Naval personnel, for the following reasons: (1) the by-mail method achieved a satisfactory return rate of 85 per cent after one follow-up reminder; (2) the rates of admission of heavy drinking were as high in the by-mail method as in the on-site method; and (3) the by-mail method is found to be superior on the grounds of sampling convenience and statistical efficiency, as well as on the grounds of cost.

However, sensitive issues such as drinking problems are not to be dealt with lightly in indiscriminate mass mail questionnaires to service personnel. The careful controls which were used in this study and which will be necessary in future by-mail surveys of drinking practices are spelled out in Chapter IV and Appendix A of this report.

Comparisons of Results for Officers and Enlisted Men (Chapter V)

While this pilot study was designed primarily as a controlled experiment to test the relative efficiency of the two survey methods summarized above, some of the results of this pilot study are presented as a preview of the types of information to be obtained in a later full-scale survey of Naval personnel. Primary emphasis is given in this pilot study to comparisons of findings for officers and enlisted men. The general finding is that the rate of problem drinking is materially higher among enlisted men than among officers, and also materially higher among junior enlisted men below the grade of E-6 than among the senior men.* The difference between junior and senior officers in their drinking behavior was small; it is possible that there will be found to be a larger difference when a full-scale survey is conducted in which warrant officers are reported separately from junior officers and in which the samples are larger and more representative of the Navy as a whole.

Enlisted men had a higher incidence rate than officers for every one of 13 specific types of actual or potential drinking problems (Table 15), except for "problems with wife," where officers and enlisted men had equivalent rates. In general, junior enlisted men had the highest incidence rates for all kinds of problems. Fifteen per cent of junior enlisted men reported job-related drinking problems within the

*It should be emphasized that the term "problem drinking" as used throughout this report refers to self-reported consequences of drinking, rather than to drinking behavior as such. Thus, the occurrence of "problem drinking" is, at least in part, a function of such factors as exposure, social milieu, visibility and the protectiveness of the social environment.

last three years, and 21 per cent of the same men reported they had been high or tight on duty one or more times within that period.

A higher proportion of the junior enlisted men (33%) report drinking more at their current duty station that at their last station, than is true for other men (Table 20). Half the junior enlisted men report having been high or tight six or more times while at their present duty station. As to reasons for drinking more at one's present duty station, both officers and enlisted men emphasized social reasons and encouragement to drink (e.g., frequent "happy hours" and semiofficial parties). Enlisted men were more likely than officers to blame deprivation, loneliness or job pressures as reasons for excessive drinking at their present duty station.

Sixty-one per cent of the enlisted men and 44 per cent of the officers (Table 21) expressed the opinion that the incidence of drinking problems is higher among Navy men than among civilian men of the same age.

While enlisted men had a higher rate of permissiveness in their attitudes about intoxication among service personnel (Table 22), a relatively high proportion of officers also expressed permissiveness about drunkenness in response to such items as "It's all right to get drunk once in a while as long as it doesn't get to be a habit," "getting drunk occasionally is a good way to blow off steam," and "Most of my friends don't mind a person getting drunk if he doesn't do things that disturb other people."

Only a handful (4% of enlisted men, and 2% of the officers in this pilot study) reported (Table 25) that they themselves needed help with a drinking problem, despite widespread evidence of adverse consequences of drinking (39% of enlisted men and 24% of the officers

reported having had some kind of problem related to drinking within the last three years). Tendencies toward denial of drinking problems are also reflected in the finding that only two per cent of the enlisted men and one per cent of the officers reported they had ever tried to get help for a drinking problem.

Certain other attitudes, however, have more encouraging implications for programs of prevention and treatment of problem drinking. Large majorities rated several of the customary agencies for helping the problem drinker (such as civilian and military physicians, clergymen, Alcoholics Anonymous, and "A service alcoholism treatment facility") as being good places to send a friend who needed help with a drinking problem (Table 25). Also, almost nine out of ten agreed with the statement that "If Naval personnel have been successfully treated for alcoholism, they should be handled like anybody else in terms of assignments and promotions." However, one of the reasons for apparent reluctance of problem drinkers to seek help through military channels may be reflected in the finding that 69 per cent of enlisted men and 77 per cent of the officers in this pilot study agreed with the statement that "Naval personnel with drinking problems usually do not try to get help through Service sources because they are afraid of damaging their careers."

Findings of widespread confusion about the nature of "alcoholism" and its causes are presented and discussed at the end of Chapter V. The inference is drawn that there is need to clarify which kinds of "alcoholism" and which kinds of alcohol-related ineffectiveness on duty are best prevented or treated with what kinds of methods.

Comparison of Results for Four Types of Sample Sites (Chapter VI)

Four localities were chosen rather arbitrarily to represent different types of conditions that might be related to different types of drinking behavior and problems (San Diego, Whidbey Island NAS, Washington, the Yokosuka area in Japan, and Guam). The four localities did not differ materially in the rates of problem drinking reported (Tables 27 and 28), although there was some tendency for Guam to exhibit lower rates than the other installations. In increases in drinking and frequency of intoxication at one's present duty station compared to one's last prior post (Table 29), the two overseas installations materially outdistanced the two stateside installations.

With respect to reasons for getting high or tight at their present duty stations, reasons of social encouragement (exemplified in the statements "because we have lots of parties among Naval personnel here" and "because we frequently celebrate special occasions . . . ") were mentioned most often at all four installations, but more frequently overseas than stateside. The low price of alcoholic beverages was a much more popular reason in Japan and Guam than in the two continental stations; and, at least among enlisted men, those at overseas bases were more likely than those at San Diego or Whidbey to assert that "drinking is just about the only recreation available here" (Table 29). The projected full-scale survey of drinking practices throughout the Navy will permit a more detailed analysis of the types of conditions which tend to foster or to discourage a high rate of heavy drinking.

Chapter VII presents detailed recommendations for future research and evaluation procedures concerning educational, preventive, and treatment programs designed to reduce the incidence of problem drinking among Naval personnel.

CHAPTER II

METHODS UTILIZED IN THIS EXPERIMENTAL STUDY

This pilot study was conducted as a necessary preliminary step to a projected service-wide survey of the attitudes and behavior of Naval personnel concerning alcohol consumption and alcohol-related problems. Such a study will provide the Bureau of Naval Personnel Alcohol Abuse Control Program and other Navy agencies with a base of information for planning future programs that will take account of the felt needs, anxieties, values, attitudes, misconceptions, and drinking habits of those to be affected either directly or indirectly by the control program.

Need for Service-Wide Study

At this time, no service-wide study of drinking attitudes and problems has been conducted. A recent DOD staff study states that "The Department of Defense has no complete, reliable data that shows the extent of alcoholism in the armed forces."[4] The staff study, which was based on interviews with more than 600 military management personnel but no samples of military personnel about their own drinking attitudes or behavior, resulted in a recommendation

> . . . that studies be undertaken by DOD to determine more precisely the incidence of alcoholism and problem drinking. The results of these studies will assist in determining the extent and amount of resources required for a comprehensive alcoholism control program.

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[4]*Comptroller General of the U.S., Report to the Subcommittee on* Alcoholism and Narcotics of the Senate, Alcoholism Among Military Personnel, B-T64031(2), November 2, 1971.

The same staff study noted, with respect to the need for research on alcohol problems in the armed forces:

> A prior GAO staff study focused on Federal civilian employees yielded a gross estimate that the Federal Government could realize annual savings of from $135 million to $280 million from an alcoholism program for civilian employees, assuming prevalence rates of alcoholism ranging from four to eight per cent. Additionally, the study stated:
>
> For each 1-percent reduction in the incidence of alcoholism [within the armed forces], the potential gross savings could be about $24 million annually. If the incidence is comparable to the estimated average 5 percent in the civilian work force, then the potential annual gross savings could amount to about $120 million.
>
> Although the incidence of alcoholism in the military population may be no greater than that of the civilian population, it could be a more serious problem because of the frequently dangerous and critical duties involved.
>
> Many senior command and staff officers at military bases in the United States and overseas who talked about this believed that the incidence of alcoholism among military personnel was negligible and, in any event, was lower than that among the civilian population. But others closely involved with alcoholism believed that the incidence was at least the same as that in the civilian work force.
>
> Factors which could affect the incidence of alcoholism among military personnel included: social climate, family separations, low cost and ready availability of alcoholic beverages, and boredom.
>
> Factors which could discourage the development of alcoholism among military personnel included military discipline and standards and the lower average age of the military.
>
> Negative attitudes and punitive statutes and regulations have resulted in hiding the problem. The military alcoholic has little incentive to come forward and seek help.
>
> No DOD-wide alcoholism prevention and rehabilitation program existed for military personnel, nor were there any guidelines specifying procedures to be followed in treating them. As a result the treatment given to the military alcoholic at many bases was limited. Alcoholism rehabilitation programs, however, have been formally established at some military installations, and DOD has recently established a task force to study all aspects of alcohol abuse among military personnel.

Recent large-scale national surveys of drinking practices and drinking problems conducted by The George Washington University and the

School of Public Health at the University of California at Berkeley[5] indicate that even if the incidence of drinking problems among Naval personnel were no higher than within the civilian population, the rate of drinking problems would be high enough to warrant serious concern. Within the U.S. civilian population most comparable to the military population in general terms--men 21 to 59--a recent national survey reported in a new monograph[6] found that 19 per cent of these civilian men had experienced some adverse consequences of excessive drinking within the last three years (such as problems with other people or the police, or health or economic problems), and an additional 13 per cent drank heavily enough to be at considerable risk of adverse consequences.

These findings suggest that if the military men are at all similar in their drinking habits to their civilian counterparts, it is likely that incidence of drinking problems among Naval personnel would be found to be rather high, particularly since a large share of military personnel are in the younger age groups which the recent civilian studies have shown to have the highest rates of drinking problems.

A study of drinking attitudes and behavior among Naval personnel should be service-wide in order to be of optimal usefulness, because most people in the Navy can be affected directly or indirectly by alcohol misuse, either as supervisors or leaders, or as co-workers affected by the behavior of others, or as the minority whose own

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[5]Don Cahalan, Ira H. Cisin, and Helen M. Crossley, American Drinking Practices, Rutgers Center of Alcohol Studies, Rutgers University, 1969.
Don Cahalan, Problem Drinkers, op. cit.
Don Cahalan and Robin Room, Problem Drinking Among American Men, op. cit.

[6]Don Cahalan and Robin Room, Problem Drinking Among American Men, op. cit.

performances and careers and personal lives are adversely affected by their own misuse of alcohol. A Navy-wide survey would be a rather substantial undertaking, requiring a sample of perhaps 5,000 to 10,000 in order to permit analysis of findings for subgroups that may play an important part in contributing to the Navy's alcohol abuse problem (e.g., to isolate which types of service and preservice backgrounds are the most likely to be associated with high problem drinking rates). The pilot study here reported was conducted for the purpose of assisting in the planning of a Navy-wide survey: in terms of determining what would be the best methods of data-gathering, in pilot-testing various types of survey content and methods of presentation, and in the accumulation of preliminary information on drinking practices and problems for interim Navy guidance.

Methods to be Compared

The recent nation-wide civilian surveys of drinking practices and problems represent a standard of comparison against which to assess similar issues among Naval personnel. The national surveys of civilians evolved out of more than a decade of careful experimentation and standardization of measurements to cover the rather sensitive topic of drinking behavior; it would be advantageous to design the Navy study to parallel these civilian studies so as to make it possible to measure the behavior and attitudes of Naval personnel in comparison with civilians of comparable age ranges.

However, it is inevitable that a survey will not be conducted in the same way within a military population as within a civilian population. One consideration is that the issues are somewhat different:

the military environment not only is in some respects a more sheltered environment insofar as service personnel's needs are concerned, but it is a more exacting environment insofar as it demands a higher standard of physical fitness and readiness for emergencies. Thus the issues of fitness for duty and time lost from duty status because of excessive drinking or hangovers may need greater emphasis in a military study than in a civilian one. Another consideration requiring some adaptation of civilian survey instruments for military applications is that military organization makes practical the use of self-administered survey methods instead of the much more expensive personal interview.

Cost/effectiveness comparisons conducted within the Armed Forces early during World War II[7] demonstrated that not only are personal interviews unduly expensive for most purposes, but that military personnel can be expected to give more reliable and valid answers to unsigned self-administered questionnaires, particularly on sensitive topics. The issue, then, is not so much whether to use self-administered questionnaires, but which of two self-administered methods to adopt:

1. The field-administered questionnaire method was rather well standardized during World War II in its application to military populations. Normally, this method calls for the drawing of probability (scientifically randomized) samples of military installations, of units from within installations, and of individuals within units, so that finally the names of specific respondents are selected. Respondents are then requested by a field administrator to fill out the questionnaire (ordinarily in small groups of 15-50 under

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[7]Samuel A. Stouffer and others, Studies in Social Psychology in World War II, Princeton University Press, Vols. I-IV, 1949 and following.

the eyes of a monitor if they are enlisted men, and singly and more privately if officers). Such questionnaires are unsigned, and every effort is made to insure uniformity of administration and the preservation of anonymity of respondents.

The field-administered questionnaire yields excellent results for most military requirements, is much more quickly and inexpensively administered than large-scale personal-interview surveys, and yields better validity than the personal interview when anonymity of respondents is an important issue. However, a by-mail variant of the self-administered questionnaire has certain additional advantages under certain circumstances. These advantages are described below.

2. The by-mail self-administered questionnaire method can effect a vast saving in personnel and travel costs over the field-administered method. There are also certain additional advantages in the by-mail survey: less disruption of field operations for the mustering of officers and men to fill out questionnaires; the statistical advantages of being able to draw truly random, unclustered samples from personnel rosters stratified by a number of variables (e.g., by commands, by grades, by age and educational levels, etc.); and greater flexibility in planned oversampling of certain relatively small populations (e.g., Chief Warrant Officers) for sampling and reporting efficiency.

The principal uncertainty about the by-mail approach is its return rate. By-mail surveys among civilian populations tend to yield relatively small return rates, except under special circumstances. However, the disciplinary situation within the military

makes it possible to attain satisfactorily high return rates, provided that one applies the authority to require military personnel to return a questionnaire as a duty but without doing damage to the respondent's anonymity and rights of privacy. One of the Co-Directors of this Navy pilot survey has had excellent success in getting high return rates in sampling military populations (83% to 86%)[8] by mail. The method in those Army studies was to send a questionnaire directly to the respondent through the mails, requesting a by-mail return of the unsigned questionnaire within a few days, along with a separate mail return of a postcard certifying that the questionnaire had been returned. The incentive which aided in bringing about such high return rates was the respondent's knowledge that if he did not return the questionnaire, he would continue to get repeated requests until he had certified that he had returned it.

There were three other uncertainties about the use of the by-mail method--despite its apparent success in the instances cited--which required the conducting of the controlled methodological experiment in this pilot study. One is that Cahalan achieved those high by-mail response rates with officer (not enlisted) samples. The second uncertainty was that the topics in the Army officer studies were much more innocuous than questions about drinking habits and problems. The third uncertainty concerned selective bias in response rates: civilian surveys indicate that prospective respondents who avoid being interviewed until after

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[8]Don Cahalan, "Effectiveness of a Mail Questionnaire Technique in the Army," Public Opinion Quarterly, 15, No. 3 (Fall 1951), 575-578.

many attempts turn out to have a materially higher rate of heavy drinking than those who are easier to interview. When a respondent gets a questionnaire in the mails, he has more opportunity to think over the possibly adverse effects of returning the questionnaire than if he is mustered into a classroom and asked to fill it out on the spot; and thus it would be expected that any bias in non-return would be higher with the by-mail technique than with the field-administered method. Accordingly, quite high return rates (of 80% or better) would be necessary in using the by-mail technique in order to provide safeguards against serious bias through nonresponse.

Experimental Design of the Pilot Study

The study was designed primarily to test the relative effectiveness of the by-mail and field-administered methods in planning for an extensive Navy-wide survey of attitudes and practices concerning heavy and problem drinking. One prime requirement was that the content of the inquiry be as close as possible to the content of any planned service-wide survey, so that the most efficient method as determined in the pilot study could be applied in a large-scale survey with confidence that it would yield valid results. Another key requirement was that the experiment take into account whether one method was more efficient under all types of conditions, or whether a method's efficiency is dependent upon the subgroup being studied. Here the chief variables considered to be of interest were officer v. enlisted status, junior v. senior grade or rank within officer or enlisted status, and type of duty.

Accordingly, the experiment was designed to yield approximately equal numbers of completed questionnaires for each of the following subgroups within a planned sample of 1600-1800 respondents:

1. Those given the by-mail questionnaire v. those given an on-site administered questionnaire (approximately 800-900 for each method).

2. Officers v. enlisted men (approximately equal numbers of each, with sufficient-sized samples to permit further analysis of findings by junior or senior rank or grade).

3. The type-of-duty variable was entered into the experimental design by including approximately equal numbers of respondents at each of the following four types of localities:

   Nonisolated stateside localities (San Diego was selected as representative).

   Relatively isolated stateside localities (NAS Whidbey Island, Washington).

   Nonisolated foreign localities (Yokosuka, Japan).

   Isolated foreign localities (Guam).

Details of the sampling and field procedures are presented in Appendix A, and full copies of the questionnaires and field forms appear in Appendix C. In brief, after a pretest in Norfolk of 99 enlisted men and 30 officers to check out field methods and the clarity and adequacy of the items in the questionnaire, a field team consisting of the Bureau of Naval Personnel and Bureau of Social Science Research representatives visited each of the four selected localities. Approximately equal samples of officers and enlisted men at each locality were randomly assigned to one of the two questionnaire administration methods.

Those chosen for on-site field administration were assembled (in groups for enlisted men, and in groups or singly for officers). They were briefed on the objectives of the survey and were reassured about respondent anonymity. The field administrator stood ready to answer questions to clarify any items that respondents found hard to understand. When questionnaires were completed by enlisted men, as time permitted, the field administrator rapidly scanned the questionnaires to see whether the most important items had been answered.

Envelopes were prepared for those chosen for by-mail administration, and the questionnaire was delivered to each respondent individually via the liaison officer for the local command. The questionnaire was accompanied by a franked return envelope and a separate postcard which the respondent was requested to return to certify that he had returned the questionnaire. A follow-up second mailing of the questionnaire was sent to the approximately 250 who failed to return a postcard certification within several weeks, along with an exhortation to return the questionnaire.

The following summary of completion or return rates is adapted from Table 30 in Appendix A:

	By-Mail Administration			On-Site Administration		
	Officers	Enlisted	Total	Officers	Enlisted	Total
Initial sample drawn	404	591	995	402	588	990
Questionnaires completed (excluding blanks and spoiled forms)	383	462	845	325	433	758
Completion rate	95%	78%	85%	81%	74%	77%

The completion rate for the mail sample was higher (85%) than for the on-site sample (77%). As noted in Table 30 in Appendix A, if one sets aside those whose names were drawn for the sample but who were adjudged to have a legitimate reason for absence (such as being on leave or no longer with the unit), the return rate would be 86 per cent for the by-mail method and 81 per cent for the on-site administration. On either basis, the response rate for each method is well within acceptable standards.

Comparisons of findings with the two methods, and conclusions on how these methods should be utilized in future surveys, appear in Chapter IV. Comparisons of findings for officers and enlisted men, and for the four types of sample sites, appear in Chapters V and VI, respectively. Again, details of the sampling and field procedures appear in Appendix A, and copies of the questionnaires and field forms are presented in Appendix C.

CHAPTER III

DEFINING AND MEASURING DRINKING PROBLEMS AND DRINKING BEHAVIOR

The principal scales for measuring the prevalence of drinking problems or potential problems in this pilot study of Naval personnel were adapted rather directly from the latest (1969) nation-wide study conducted among civilian men aged 21-59, reported in the new Cahalan-Room monograph mentioned earlier. These methods for measuring drinking problems are based upon a decade of work conducted by social scientists at The George Washington University and the University of California.[9] The drinking problem scales used in the 1969 civilian survey and this Navy pilot survey were of two types:

a. Thirteen specific types of drinking problems or potential problems:

1. Heavy intake of alcohol
2. Binge drinking
3. Psychological dependence upon alcohol
4. Loss of control
5. Drinking symptomatic of addiction or compulsive use of alcohol

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[9] Cahalan, Problem Drinkers, op. cit.
Cahalan and Room, Problem Drinking Among American Men, op. cit.
Walter Clark, "Operational Definitions of Drinking Problems and Associated Prevalence Rates," Quarterly Journal of Studies on Alcohol, 1966, 27, 648-668.
Genevieve Knupfer, "The Epidemiology of Problem Drinking," American Journal of Public Health, 1967, 57, 973-986.

6. Belligerence when drinking
7. Problems with wife over one's drinking
8. Problems with relatives
9. Problems with friends or neighbors
10. Job problems
11. Police problems
12. Health or injury problems
13. Financial problems associated with drinking.

b. A general typology of drinking problems, divided as follows:

Nondrinker (drinks less than once a month).

Drinks but does not report any problems.

Potential problems only (psychological dependence, loss of control, symptomatic drinking, belligerence when drinking).

Heavy intake or binge drinking, but not a high tangible consequence score.

High tangible consequences score.

Thirteen Specific Types of Drinking Problems or Potential Problems

The general approach in assessing drinking problems here is to consider a "drinking problem" to be any problem closely connected with drinking. Such an approach covers a much broader field than the clinically-defined "alcoholic," since the term "problem drinkers" as defined in these studies includes "the alcoholic" and any others who have had drinking problems recently, even if for a relatively short time: most of the drinking problem rates presented in this report are based upon having had a problem at any time during the last three years.

This broader definition of drinking problems is consistent with the Navy's interest not only in clinically-defined "alcoholism" among its personnel, but also with drinking problems which impair working efficiency and injure the reputation of the armed forces.

In keeping with this broad definition, several problems which are only potential in nature (such as "psychological dependence upon alcohol," "loss of control," "symptomatic drinking," and "belligerence when drinking") are included among the thirteen problems in order not to overlook any potential problems which might have longer-term consequences for the individual. Further longitudinal studies of the civilian population, now being conducted by the University of California, will establish whether such potential problems tend to have later consequences or whether their longer-term effects are uncertain. In this report, such potential problems are clearly distinguished from overt problems in the analysis of the pilot survey data.

Fuller details of the specific items and the scoring procedures are given in Appendix B. Scores were generally concerned with current (within-last-three-years) drinking problems or potential problems. Contents of the scale are summarized as follows:

1. Heavy intake: defined as drinking five or more drinks during one occasion at least four days a week, or eight or more drinks at one occasion at least weekly, or 12 or more drinks per occasion at least monthly.

2. Binge drinking: stayed intoxicated for more than a day at a time during the last three years.

3. Psychological dependence: a high score on using alcohol to change one's mood--such as finding alcohol helpful when depressed or nervous, or drinking to forget one's worries.

4. Loss of control: inability to stop drinking once one has started, or inability to refrain from drinking at inappropriate times.

5. Symptomatic drinking (drawn largely from Jellinek's classical symptomatology).[10] Includes such items as sneaking drinks, having blackouts after drinking, and drinking to alleviate hangovers.

6. Belligerence while drinking: getting angry or getting into fights while drinking.

7. Problems with wife: she threatened to leave the respondent, or actually did leave him, at some time during the last three years because of his drinking.

8. Problems with relatives: they strongly urged him to cut down on his drinking or to quit.

9. Problems with friends or neighbors: strong pressure to cut down or quit.

10. Job problems: drinking occasioned the loss, or threat of loss, of a job.

11. Police problems: arrested for being drunk or for his behavior after drinking.

12. Health or injury: was advised by a physician to stop drinking, or was injured because of his drinking.

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[10]E. M. Jellinek, "Phases of Alcohol Addiction," Quarterly Journal of Studies of Alcohol, 13, 1952, 673-684.

13. Financial problems: expenditures for alcohol deprived the respondent or his family of some necessities.

Additional Drinking Problems Specific to the Military

The Navy pilot study added a number of items to permit a more exact measurement of the effects of excessive drinking upon the person's career or his on-duty performance:

a. Career may have been injured because of the following:

   1. Drinking may have hurt his chances for promotion or a better assignment;

   2. Got a lower score on efficiency report or performance evaluation because of his drinking;

   3. Received judicial punishment because of excessive drinking;

   4. Received nonjudicial punishment because of excessive drinking.

b. Lost time from duty because of drinking:

   1. In hospital or infirmary for illness connected with drinking;

   2. Off-duty as outpatient because of drinking (but medically excused);

   3. Off-duty because ill from drinking (not medically excused);

   4. Absent without leave because of drinking.

c. Work performance was impaired because of drinking:

   1. Late to work or left work early because of drinking or hangover;

   2. On duty, but did not work efficiently because of drinking or hangover;

   3. On duty, but so involved with problems related to drinking that he did not work at normal efficiency.

Findings on the incidence of these specific drinking problems affecting one's performance on duty are presented in Tables 2, 13, 15, 16, 17 and 28 in Chapters IV and V.

CHAPTER IV

COMPARISONS OF FINDINGS WITH MAIL AND FIELD-ADMINISTERED QUESTIONNAIRES

As noted at the end of Chapter II, both the by-mail and the on-site-administered data collections achieved the respectable completion rate of usable questionnaires of 85 per cent for the former method and 77 per cent for the latter. Both were well within standards for return rates for military surveys or probability samples of the civilian population. However, while the officer portion of the by-mail sample attained the unprecedented completion rate of 95 per cent (11 points higher than for the on-site-administered officer sample), the enlisted portion of the by-mail sample had the smaller completion rate of 78 per cent. While this mail enlisted return rate was four percentage points higher than the comparable on-site enlisted sample, it is possible that the by-mail sample may have been somewhat biased by a selectively lower return rate from heavy drinkers, since they would have had the opportunity to inspect the questionnaire at their leisure and to decide not to cooperate in completing it (or to decide to return it blank through the mails). On the other hand, the on-site administered setting did not provide as much opportunity for the selected respondents to have prior knowledge of the detailed nature of the inquiry and thus the heavier-drinking on-site respondents hypothetically would have had less opportunity to try to avoid participation in the survey.

The best way to compare potential biases in samples is to compare actual results. This survey was designed as a controlled experiment to compare the results obtained with the two methods: the samples were carefully matched by stratifying the names of prospective respondents by unit and by officer-enlisted status, and then by randomly assigning alternate names to each of the two methods. Every item on the survey was tabulated separately for respondents in each of the two subsamples; and no single instance of a material difference in responses was found for the two subsamples.

Tables 1 through 13 below present comparisons of empirical findings for the by-mail and on-site methods of questionnaire administration for all of the scores and items of primary interest. These same items are discussed in more detail in the next Chapter (where responses of officers and enlisted men are compared); but here it will be noted merely that in none of the aforementioned tables is there a difference of consequence for any item for the two methods.

Because of the possibility that biases in one direction might be cancelled out by biases in another direction, three additional tables were prepared to subdivide the respondents into two groupings which might be expected to vary in their response rates to mail and on-site methods of questionnaire administration. Tables 10 and 11 present findings on rates of drinking problems for respondents divided according to the two methods and further into junior and senior officers and enlisted men; Tables 12 and 13 present findings on problem drinking and consequences by each method of administration, further subdivided by the four localities covered in the survey. In none of these analyses was there found to be a material difference in rates of

problem drinking according to method of administration of the survey, whether assessed in the aggregate or further controlled by officer/enlisted and junior/senior status or by the four localities in which the survey was conducted.

In the light of these findings pointing to the superiority of the by-mail method to the on-site administered method from the standpoints of costs, completion rates and comparability of findings, it is recommended that the by-mail method be used for the projected large-scale survey of drinking practices throughout the Navy. Some of the specifics of the planning of such surveys are discussed in detail in Chapter VII below.

TABLE 1

CURRENT DRINKING PRACTICES AND THEIR CONSEQUENCES
BY TYPE OF QUESTIONNAIRE ADMINISTRATION
(OFFICERS AND ENLISTED MEN COMBINED)
(In Percentages)

Current (Last Three Years) Problem Typology	Results	
	By-Mail (N=845)	On-Site (N=758)
Nondrinkers.	3	3
Drank, no problems	26	24
Potential problems only (dependence, loss of control, symptomatic drinking, belligerence).	20	22
Heavy intake or binge drinking, but not a high consequences score.	20	19
High consequences score[a]	32	32
Total[b]	101	100

[a]Reported numerous unfavorable social consequences of drinking behavior (problems with wife, relatives, friends or neighbors, on the job, or with police) or health or injury or financial problems, listed in Table 2. See Appendix B for details of scoring procedure.

[b]Because of computer rounding, totals actually may vary from 99 to 101 per cent.

TABLE 2

SPECIFIC DRINKING PROBLEMS BY TYPE OF QUESTIONNAIRE ADMINISTRATION
(OFFICERS AND ENLISTED MEN COMBINED)
(In Percentages)

Specific Current Problems (Last Three Years)	Results	
	By-Mail (N=845)	On-Site (N=758)
Heavy intake (3+)[a]	33	35
Binge drinking (2+)	9	10
Psychological dependence (4+)	10	10
Loss of control (3+)	12	11
Symptomatic drinking (3+)	25	24
Belligerence (2+)	22	23
Problems with wife (3+)	19	19
Problems with relatives (2+)	8	9
Problems with friends, neighbors (2+)	14	14
Job problems:[b] (2+)	11	9
Hurt chances for promotion[b]	3	3
Lower score on efficiency rating	2	3
Court-martialed	1	-[c]
Received nonjudicial punishment	1	1
Off duty, sick for week or longer	-[c]	-[c]
In hospital or infirmary	1	1
Hard to function on job without a drink	2	4
High or tight on duty[b]	10	11
Police problems (2+)	9	12
Financial problems (2+)	14	13
Health or injury problems (2+)	2	3

[a]Value in parentheses indicates the score criterion for an evaluation of "high" on the variable indicated. See Appendix B for details of scoring procedures.

[b]The "Job problems" scale consisted of five items (see Appendix B) of which two (promotion, high or tight) are shown here.

[c]Less than one-half of one per cent.

TABLE 3

OPINIONS ABOUT DRINKING IN THE NAVY BY
TYPE OF QUESTIONNAIRE ADMINISTRATION
(OFFICERS AND ENLISTED MEN COMBINED)
(In Percentages)

Opinions About Drinking	Results	
	By-Mail (N=845)	On-Site (N=758)
Percentage of men with drinking problems in Navy is much or somewhat higher than among civilian men of the same age. .	55	52
Estimates that group has a larger percentage of men whose drinking hurts duty performance or personal life (compared to Navy as a whole):[a]		
In remote overseas areas accompanied by dependents.	25	23
In nonremote overseas areas accompanied by dependents.	7	7
In remote areas unaccompanied.	86	86
In nonremote areas unaccompanied	64	67
Aviation personnel	21	20
Medical/dental	4	5
Surface-vessel personnel when ashore	51	50
Submarine personnel when ashore.	45	51
Staff personnel in general	18	19
Junior enlisted men (E-1 through E-4). . . .	26	27
Enlisted men E-5 and E-6	34	31
Senior enlisted men (E-7 through E-9). . . .	51	46
Junior officers (O-1 through O-3).	10	11
Warrant officers	23	23
Senior officers (O-4 and higher)	25	24
Enlisted men on liberty from a ship.	75	77
Officers on shore leave from a ship.	47	47

[a]Multiple responses to this question were possible.

TABLE 4

VIEWS ON DRINKING AND INTOXICATION BY
TYPE OF QUESTIONNAIRE ADMINISTRATION
(OFFICERS AND ENLISTED MEN COMBINED)
(In Percentages)

Responded "True"[a]	Results	
	By-Mail (N=845)	On-Site (N=758)
It's all right to get drunk whenever you feel like it	19	21
It's all right once in a while as long as it doesn't get to be a habit.	66	69
No matter how much I like a person, I hate to see him drunk.	49	42
I enjoy getting drunk once in a while.	53	56
Most of my friends don't mind a person getting drunk if he doesn't disturb other people	82	81
I often feel guilty about my drinking.	18	16
A party isn't a party unless drinks are served	33	32
People who don't drink at all are usually not much fun to be around.	15	12
Getting drunk occasionally is a good way to blow off steam.	42	45

[a]Multiple responses to this question were possible.

TABLE 5

DRINKING AT CURRENT DUTY STATION BY TYPE OF QUESTIONNAIRE ADMINISTRATION (OFFICERS AND ENLISTED MEN COMBINED)
(In Percentages)

Drinking at Current Duty Station	Results	
	By-Mail (N=845)	On-Site (N=758)
Drinking more at present duty station than at last duty station.	25	23
High or tight 6 or more times at present duty station	40	39
Reasons for getting high or tight at present duty station:[a]		
Frequent happy hours	11	10
Low happy hour prices.	10	11
Strong drinks here	8	8
Lots of private parties.	35	33
Low price by the bottle.	17	18
Drinking is about the only recreation here .	19	21
Because am very lonesome	11	13
Job makes me tense/nervous	17	17
Lots of unit parties	16	16
Celebrate lots of special occasions. . . .	33	34

[a]Proportion of total in group who rated the reason "Very important" or "Fairly important." Multiple responses to this question were possible.

TABLE 6

ACTIVITIES HELPFUL WHEN DEPRESSED OR NERVOUS
BY TYPE OF QUESTIONNAIRE ADMINISTRATION
(OFFICERS AND ENLISTED MEN COMBINED)
(In Percentages)

Activities Very or Fairly Helpful When Depressed or Nervous[a]	Results	
	By-Mail (N=845)	On-Site (N=758)
Smoking	39	42
Eating	26	27
Having a drink such as a highball or cocktail or some wine or beer[b]	45	43
Working harder than usual either on duty or off duty	64	60
Taking a tranquilizer	6	7
Taking some other kind of pill or medicine	5	6
Going to church or saying a prayer	38	37
Talking it over with a friend or relative	77	79
Just trying to forget about it	34	36
Taking part in active exercise	71	68

[a]Multiple responses to this question were possible.

[b]Also forms part of the "Psychological Dependence" potential problems scale.

TABLE 7

REASONS FOR DRINKING BY TYPE OF QUESTIONNAIRE ADMINISTRATION
(OFFICERS AND ENLISTED MEN COMBINED)
(In Percentages)

Reason Rated as Very or Fairly Important Reason for Drinking[a]	Results	
	By-Mail (N=845)	On-Site (N=758)
To help me relax	50	50
Because I like the taste	69	67
I drink to be sociable	69	65
Because the people I know drink	32	29
When I want to forget everything[b]	9	11
To celebrate special occasions	80	78
Helps me forget my worries[b]	15	17
Polite thing to do in certain situations	56	60
Helps cheer me up when I'm in a bad mood[b]	28	28
Because I need it when tense and nervous[b]	18	17
Helps me feel better when I am not feeling well	13	15
Can help me think and work better	5	5
Helps me gain self-confidence	20	21
Helps me when lonesome	22	22
When have nothing else to do	21	18
Drinking helps me in my relationships with women	16	18

[a]Multiple responses to this question were possible.

[b]These items also form part of the "Psychological Dependence" potential problems scale.

TABLE 8

TREATMENT FOR ALCOHOL PROBLEMS OF SERVICE PERSONNEL
BY TYPE OF QUESTIONNAIRE ADMINISTRATION
(OFFICERS AND ENLISTED MEN COMBINED)
(In Percentages)

Treatment for Alcohol Problems	Results	
	By-Mail (N=845)	On-Site (N=758)
Needs help with a drinking problem	3	2
Have tried to get help for a drinking problem.	2	2
Very or fairly good place for friend with drinking problem to go for help:[a]		
A civilian doctor.	70	75
Civilian minister, priest, or rabbi.	70	74
Alcoholics Anonymous	94	93
A military doctor.	76	78
A service chaplain	73	74
His commanding officer	49	48
A service alcoholism treatment facility. . .	89	89
Agree with following statement:[a]		
Naval personnel afraid to get help through Service.	72	73
Naval personnel successfully treated for alcoholism should be assigned and promoted like everybody else	87	88
Navy should ease alcoholics out of Service without wasting time and money on them.	8	8

[a]Multiple responses to this question were possible.

TABLE 9

INFORMATION AND OPINIONS ABOUT ALCOHOL PROBLEMS
BY TYPE OF QUESTIONNAIRE ADMINISTRATION
(OFFICERS AND ENLISTED MEN COMBINED)
(In Percentages)

Information and Opinions About Alcohol Problems	Results	
	By-Mail (N=845)	On-Site (N=758)
Recall Navy information about effects of drinking too much:[a]		
In movie or film strip	62	62
In lecture or talk	63	64
In pamphlet or written material	64	62
Which one definition of alcoholism comes closest to your own opinion:[a]		
Like an allergy or physical condition some people born with	6	7
Mostly habit like cigarette smoking	41	47
Usually caused by social environment	24	23
Something else (write in)	25	23
Multiple answers	1	-[b]
No answer	5	1
Alcoholism is basically a sign of moral weakness	37	36
There is really no cure for alcoholism	13	11
Alcoholism is a disease	78	74

[a]Multiple responses were possible for all except the second set of items on this page.

[b]Less than one-half of one per cent.

TABLE 10

CURRENT DRINKING PRACTICES AND CONSEQUENCES BY PAY GRADE CATEGORY AND TYPE OF QUESTIONNAIRE ADMINISTRATION
(In Percentages)

Current (Last Three Years) Problem Typology	Results							
	By-Mail				On-Site			
	Enlisted Men		Officers		Enlisted Men		Officers	
	Junior (N=285)	Senior (N=175)	Junior (N=233)	Senior (N=148)	Junior (N=273)	Senior (N=159)	Junior (N=222)	Senior (N=103)
Nondrinkers	3	3	2	3	4	2	3	1
Drank, no problems	17	26	34	34	17	25	26	41
Potential problems only (dependence, loss of control, symptomatic drinking, belligerence)	17	16	25	22	15	15	32	26
Heavy intake or binge drinking, but not a high consequences score	19	27	16	17	22	22	16	12
High consequences score[a]	44	27	24	25	42	36	23	20
Total[b]	100	99	101	101	100	100	100	100

[a]Reported numerous unfavorable social consequences of drinking behavior (problems with wife, relatives, friends or neighbors, on the job or with police) or health or injury or financial problems. See Appendix B for details of scoring procedure.

[b]Because of computer rounding, totals actually may vary from 99 to 101 per cent.

TABLE 11

SPECIFIC DRINKING PROBLEMS BY PAY GRADE CATEGORY AND TYPE OF QUESTIONNAIRE ADMINISTRATION
(In Percentages)

Specific Current Problems (Last Three Years)	Results							
	By-Mail				On-Site			
	Enlisted Men		Officers		Enlisted Men		Officers	
	Junior (N=285)	Senior (N=175)	Junior (N=233)	Senior (N=148)	Junior (N=273)	Senior (N=159)	Junior (N=222)	Senior (N=103)
Heavy intake.	44	40	22	22	48	45	20	17
Binge drinking.	15	11	4	-	17	13	5	-
Psychological dependence.	13	9	6	9	16	8	5	7
Loss of control	17	11	9	7	15	12	7	5
Symptomatic drinking.	39	22	18	12	36	20	18	11
Belligerence.	31	20	16	16	33	26	14	11
Problems with wife.	13	26	18	23	14	28	16	25
Problems with relatives	13	6	5	5	13	12	4	7
Problems with friends, neighbors.	19	12	11	11	21	17	7	10
Job problems.	15	13	6	5	15	9	3	7
Police problems	14	11	5	3	19	10	7	5
Financial problems.	27	11	6	3	24	12	3	5
Health or injury problems	3	3	-[a]	2	5	4	1	1

[a]Less than one-half of one per cent.

TABLE 12

CURRENT DRINKING PRACTICES AND CONSEQUENCES BY TYPE OF QUESTIONNAIRE ADMINISTRATION AND LOCALITY[a]
(In Percentages)

Current (Last Three Years) Problem Typology	San Diego		NAS Whidbey Island		Japan		Guam	
	By-Mail (N=245)	On-Site (N=223)	By-Mail (N=198)	On-Site (N=181)	By-Mail (N=209)	On-Site (N=175)	By-Mail (N=192)	On-Site (N=179)
Nondrinkers	3	3	4	2	2	5	3	3
Drank, no problems	28	25	26	28	23	23	28	21
Potential problems only, (dependence, loss of control, symptomatic drinking, belligerence)	22	24	16	18	15	16	26	28
Heavy intake or binge drinking, but not a high consequences score	17	16	22	22	23	21	16	18
High consequences score[b]	30	32	31	30	37	35	28	30
Total[c]	100	100	99	100	100	100	101	100

[a]Data on locality are missing for one respondent.

[b]Reported numerous unfavorable social consequences of drinking behavior (problems with wife, relatives, friends or neighbors, on the job, or with police) or health or injury or financial problems. See Appendix B for details of scoring procedure.

[c]Because of computer rounding, totals actually may vary from 99 to 101 per cent.

TABLE 13

SPECIFIC DRINKING PROBLEMS BY TYPE OF QUESTIONNAIRE ADMINISTRATION AND LOCALITY[a]
(In Percentages)

Specific Current Problems (Last Three Years)	San Diego		NAS Whidbey Island		Japan		Guam	
	By-Mail (N=245)	On-Site (N=223)	By-Mail (N=198)	On-Site (N=181)	By-Mail (N=209)	On-Site (N=175)	By-Mail (N=192)	On-Site (N=179)
Heavy intake	30	30	29	34	45	45	27	32
Binge drinking	9	11	8	11	11	10	6	8
Psychological dependence	8	13	9	7	10	10	12	9
Loss of control	11	11	11	7	13	11	13	13
Symptomatic drinking	23	24	26	20	30	24	22	27
Belligerence	20	22	21	15	27	29	20	25
Problems with wife	17	18	18	16	21	21	19	22
Problems with relatives	9	9	6	8	9	11	8	10
Problems with friends, neighbors	12	14	13	10	17	17	15	17
Job problems:	10	9	9	4	12	10	12	13
Hurt chances for promotion	3	4	3	1	4	6	3	4
Lower score on efficiency rating	2	4	2	3	3	4	3	3
Court-martialed	1	-[b]	1	-	1	1	1	-
Received nonjudicial punishment	1	1	1	1	2	1	1	2
Off duty, sick for week or longer	-[b]	-[b]	-	-	1	-	1	1
In hospital or infirmary	1	1	1	2	1	2	1	1
Hard to function on job without a drink	3	5	1	2	2	3	2	4
High or tight on duty	11	11	8	7	13	15	8	12
Police problems	9	14	12	11	10	11	7	9
Financial problems	15	14	10	11	18	14	12	12
Health or injury problems	3	3	2	2	3	3	2	3

[a] Information on locality was missing from one questionnaire.

[b] Less than one-half of one per cent.

CHAPTER V

COMPARISONS OF RESULTS FOR OFFICERS AND ENLISTED MEN

This pilot study was planned primarily as a controlled experiment to test the relative effectiveness of the two methods of survey administration discussed in the preceding Chapter. As discussed in Appendix A, while probability (random) sampling methods were used within selected units insofar as possible, the four localities chosen for study were selected on a subjective basis to provide a range of presumed contrasts in environments in terms of relative isolation and deprivation. Further, the choice of units within localities was based heavily upon considerations of convenience in meeting the criterion of having relatively large numbers of officers on board (since the sample design called for almost as many officers as enlisted men), as well as upon the accessibility of the unit and the willingness of the commanding officer to have his men participate in the study.

Accordingly, although this pilot study provided a good test of the two survey administration methods (since all selected respondents were randomly assigned to one or the other of the two methods), the findings of this study can not be considered representative of the findings which would result from a large-scale probability sample of Naval personnel as a whole. However, some of the substantive findings from this pilot study are presented in this chapter to illustrate the

general types of findings which will be available when a full-scale representative sample of Naval personnel is drawn.

One of the primary variables for comparison is that of officer as against enlisted status, because of the considerable difference in average age, educational background, and income for the two groups: and it is exactly these three variables--of age, educational background, and socioeconomic status--which are found to be especially crucial in influencing the drinking behavior measured in civilian surveys. Accordingly, Tables 14 through 26 below present results for enlisted men and for officers, each subdivided into junior status (E-1 through E-5 for enlisted men and Warrant Officers[11] and Ensigns through Lieutenants for officers) and senior status (E-6 through E-9 for enlisted men, and Lieutenant Commanders, Commanders, and Captains for officers).

Drinking Problems

Table 14 below presents the findings separately for junior and senior enlisted men and for officers on a typology of drinking practices and consequences or problems. This five-category typology is made up to distinguish nondrinkers within the last three years, those who drank but without any apparent problems or potential problems, those who had only such potential problems as dependence and loss of control over their drinking, those who had high intake of alcohol per occasion but who did not record any obvious adverse consequences from drinking, and

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[11]Warrant Officers are here rather arbitrarily lumped in with the other officers; but because of their specialized tasks and their having a higher average age than the junior officers, they will be set aside for separate analysis when a full-scale survey is conducted.

TABLE 14

CURRENT DRINKING PRACTICES AND CONSEQUENCES BY PAY GRADE CATEGORY[a]
(In Percentages)

Current (Last Three Years) Problem Typology	Enlisted Men			Officers		
	Total (N=895)	Junior (N=559)	Senior (N=334)	Total (N=708)	Junior (N=455)	Senior (N=251)
Nondrinkers	3	4	3	2	2	2
Drank, no problems	20	17	26	32	30	37
Potential problems only (dependence, loss of control, symptomatic drinking, belligerence)	16	16	15	27	28	24
Heavy intake or binge drinking, but not a high consequences score	22	20	25	16	16	15
High consequences score[b]	39	43	31	23	23	23
Total[c]	100	100	100	100	99	101

[a]Data on pay grades were unavailable for two enlisted men and two officers.

[b]Reported numerous unfavorable social consequences of drinking behavior (problems with wife, relatives, friends or neighbors, on the job, or with police) or health or injury or financial problems. See Appendix B for details of scoring procedure.

[c]Because of computer rounding, totals actually may vary from 99 to 101 per cent.

those who had some unfavorable social, health, or economic consequences from drinking. It will be seen that the enlisted men--and particularly the enlisted men of the junior grades (through E-5) had materially higher rates both of adverse consequences and of heavy intake or binge drinking. There was little difference on this drinking practices typology between junior and senior officers. Almost none of either the enlisted men or officers were nondrinkers.

The finding of a higher rate of problems for enlisted men was to be expected from the results of civilian studies, which have shown a material difference by age, educational level, and socioeconomic status, with the younger, the less well-educated, and the less affluent--those more like the enlisted men than the officers in the aggregate--having a higher rate of drinking problems of most kinds. However, it was not expected that the senior officers would show about as high a rate of drinking problems as the junior officers: part of this may have been attributable to the inclusion of the Warrant Officers with the (generally younger) junior officers (these will be analyzed separately in future large-scale surveys) and part may have resulted from the not necessarily representative nature of the sample in this pilot study, drawn as it was from only four localities.

Findings for thirteen specific drinking problems or potential problems experienced during the last three years are presented in Table 15 below. The enlisted men had a higher incidence rate for every type of problem (except problems with wives) than did the officers; and the junior enlisted men had higher rates than the senior enlisted men for all problems except problems with one's wife (fewer of the junior men had wives with whom to have problems). Especially noteworthy from

TABLE 15

SPECIFIC DRINKING PROBLEMS BY PAY GRADE CATEGORY[a]
(In Percentages)

Specific Current Problems[c] (Last Three Years)	Enlisted Men			Officers		
	Total (N=895)	Junior (N=559)	Senior (N=334)	Total (N=708)	Junior (N=455)	Senior (N=251)
Heavy intake	45	46	42	21	21	20
Binge drinking	15	16	12	3	5	-
Psychological dependence	12	14	8	6	5	8
Loss of control	14	16	11	8	8	6
Symptomatic drinking	31	37	21	16	18	12
Belligerence	28	32	23	15	15	14
Problems with wife	19	13	27	20	17	24
Problems with relatives	12	13	9	5	4	6
Problems with friends, neighbors	18	20	14	10	9	10
Job problems:	14	15	11	5	4	6
Hurt chances for promotion	5	5	5	2	1	2
Lower score on efficiency rating	4	5	4	1	1	1
Court-martialed	1	1	1	-[b]	-	-
Received nonjudicial punishment	2	3	1	-[b]	-[b]	-
Off duty, sick for week or longer	1	1	1	-	-	-
In hospital or infirmary	2	1	2	-[b]	-[b]	-
Hard to function on job without a drink	5	5	4	1	1	-[b]
High or tight on duty	16	21	8	4	5	2
Police problems	14	17	11	6	6	4
Financial problems	20	26	12	4	5	4
Health or injury problems	4	4	4	1	-[b]	2

[a]Data on pay grades were unavailable for two enlisted men and two officers.

[b]Less than one-half of one per cent.

[c]See Appendix B for details of scoring procedure.

an on-duty effectiveness standpoint is the 15 per cent of junior enlisted men who had had job-related drinking problems within the last three years, and the fact that 21 per cent of the junior men reported they had been high or tight on duty one or more times within that period.

Tables 16 and 17 below explore in more detail some of the time lost from work because of drinking or the effects of excessive drinking. In actual days lost, 4 per cent of the enlisted men reported one or more days during the last six months lost off-duty because of drinking, while only five of the 706 officers in the sample reported losing whole days because of drinking. In terms of putting in only part of a day or being inefficient because of drinking or its effects, a relatively high proportion of both enlisted men (27%) and officers (22%) reported such alcohol-related inefficiency in carrying out their duties.

These preliminary findings on only four localities are merely illustrations of the kinds of aggregate statistics on the costs of excessive drinking within the armed forces which can be developed in any future large-scale survey.

TABLES 16 AND 17

TIME LOST BECAUSE OF DRINKING IN LAST SIX MONTHS BY PAY GRADE CATEGORY[a]

	Table 16: Enlisted Men									Table 17: Officers								
	Total (N=895)			Junior (N=559)			Senior (N=334)			Total (N=708)			Junior (N=455)			Senior (N=251)		
	N	%	Rate	N	%	Rate	N	%	Rate	N	%	Rate	N	%	Rate	N	%	Rate
A. Was in a hospital or infirmary for an illness connected with drinking	6	0.67	83.99	5	0.89	118.20	1	0.30	26.73	-	-	-	-	-	-	-	-	-
B. Was off duty as an outpatient because of drinking (medically excused from duty). . .	5	0.56	19.00	3	0.54	12.78	2	0.60	29.41	-	-	-	-	-	-	-	-	-
C. Was off duty because I became ill from drinking (not medically excused).	17	1.90	31.00	10	1.79	15.97	7	2.10	56.14	4	0.57	8.85	3	0.66	5.89	1	0.40	14.23
D. Was absent without leave (related to drinking)	16	1.79	27.00	13	2.33	23.96	3	0.90	32.03	1	0.14	1.26	1	0.22	1.96	-	-	-
Total (A-D):	38	4.26	160.97	29	5.19	170.90	9	2.69	144.35	5	0.71	10.12	4	0.88	7.85	1	0.40	14.23
E. Was late to work or left early because of drinking or hangover.	110	12.32	386.94	69	12.34	357.78	41	12.28	435.74	46	6.52	118.38	34	7.47	145.21	12	4.78	71.14
F. On duty but did not work at normal efficiency because of drinking or hangover. .	208	23.29	1132.82	150	26.83	1499.81	58	17.37	518.61	149	21.10	564.04	95	20.88	547.49	54	21.51	594.05
G. On duty, but so involved with problems related to drinking that I did not work at normal efficiency.	48	5.38	458.93	32	5.72	575.01	16	4.79	264.65	16	2.27	87.26	9	1.98	102.04	7	2.79	60.47
Total (A-G):	245	27.44	2139.66	175	31.31	2603.50	70	20.96	1363.34	158	22.38	780.30	103	22.64	802.59	55	21.91	739.90

LEGEND: N = Number who lost time.
% = Per cent of respondents who lost time.
Rate = $\frac{\text{Lost Days}}{\text{Duty Days}} \times 100{,}000$
Duty Days = Number of men in category x 112 duty days in last six months.

[a]Data on pay grades were unavailable for two enlisted men and two officers.

Drinking Behavior

Specially-developed questions were asked about the individual's drinking during a specific recent period of time, as an alternative method of getting at drinking practices within the Navy. Each respondent was asked about his drinking during each day and evening of the week preceding his filling out the questionnaire: whether he had had anything to drink, where did he drink, who was present, what time of day did he drink, and how many drinks did he have on that occasion. The results for enlisted men are presented in Table 18, and for officers in Table 19.

Enlisted men varied considerably in their drinking by day of the week, with fewer than 30 per cent having had something to drink on Monday or Tuesday and a high of 56 per cent drinking on Saturday. A larger percentage of officers (Table 19) than enlisted men (Table 18) drank on each day of the week, with Monday and Tuesday being the lightest days and Saturday being the day when the highest proportion of officers and men drank.

Fewer enlisted men than officers drank in their own quarters, no doubt because fewer have quarters in which they are permitted to drink. Bar and club business was (as expected) briskest on Friday and Saturday nights.

A larger proportion of the officers than of the enlisted men drank while women were present; relatively more of the officers are married and have their wives with them at their current stations.

Relatively few men, either enlisted or officers, reported drinking during normal weekday duty hours (and some of those who did report drinking before 1600 may have been on liberty or leave). Fewer

TABLE 18

DRINKING PRACTICES LAST WEEK[a] AMONG ENLISTED MEN (N=895)
(In Percentages)

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Did you have any drink containing alcohol that day or evening?							
Yes	29	27	34	30	50	56	37
No	59	59	53	57	40	35	50
Not ascertained	12	14	13	13	11	9	12
Total[b]	100	100	100	100	101	100	99
Where did you drink that day or evening? (Multiple answers)							
Bar or club on base	9	10	11	10	16	14	7
Off base bar or club or public place	7	6	8	6	13	17	8
My own quarters	12	11	14	12	16	20	14
Other private home or quarters	6	4	6	6	10	15	11
Somewhere else	2	2	2	3	5	6	5
Who was present when you had drinks that day or evening? (Multiple answers)							
Nobody else	3	3	3	2	3	3	3
Other men	17	17	19	17	29	29	19
My wife or date	10	8	11	11	21	26	16
Women other than my wife or date	6	4	6	5	12	16	10
What times of day did you have something to drink? (Multiple answers)							
Before 1100	2	1	2	1	2	4	2
1100-1600	6	5	7	7	7	14	11
1600-2000	18	17	20	18	26	30	20
After 2000	12	12	14	13	29	32	16
How many drinks altogether did you have that day and evening?							
12 or more drinks	4	2	3	3	9	12	5
8 to 11 drinks	3	2	2	2	8	10	4
4 to 7 drinks	8	8	10	8	14	15	11
2 to 3 drinks	11	11	13	11	14	14	12
One drink	4	4	5	5	4	5	6
Eight or more drinks	7	4	5	5	17	22	9
Four or more drinks	15	12	15	13	31	37	20

[a]"Last week"--last complete week before interview, beginning on Monday and ending Sunday night. Based on total sample, including nondrinkers.

[b]Because of computer rounding, totals actually may vary from 99 to 101 per cent.

TABLE 19

DRINKING PRACTICES LAST WEEK[a] AMONG OFFICERS (N=708)
(In Percentages)

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Did you have any drink containing alcohol that day or evening?							
Yes	31	34	38	35	59	62	46
No	57	54	51	54	33	29	43
Not ascertained	12	12	11	11	8	9	11
Total	100	100	100	100	100	100	100
Where did you drink that day or evening? (Multiple answers)							
Bar or club on base	5	8	9	9	24	15	6
Off base bar or club or public place	2	4	3	4	11	11	6
My own quarters	22	21	24	23	25	27	28
Other private home or quarters	5	4	6	3	11	17	9
Somewhere else	1	1	1	1	3	4	4
Who was present when you had drinks that day or evening? (Multiple answers)							
Nobody else	1	1	1	2	2	1	1
Other men	10	14	16	14	33	32	19
My wife or date	24	24	26	24	40	49	35
Women other than my wife or date	5	6	7	6	19	25	16
What times of day did you have something to drink? (Multiple answers)							
Before 1100	-[b]	-[b]	-[b]	-[b]	-[b]	1	1
1100-1600	3	4	4	4	7	13	11
1600-2000	25	26	30	27	45	42	33
After 2000	11	12	13	12	31	33	17
How many drinks altogether did you have that day and evening?							
12 or more drinks	-[b]	-[b]	-[b]	-[b]	3	3	1
8 to 11 drinks	1	-[b]	1	1	5	4	2
4 to 7 drinks	7	7	7	6	20	19	10
2 to 3 drinks	13	16	17	16	22	26	22
One drink	10	10	13	11	9	10	11
Eight or more drinks	1	-[b]	1	1	8	7	3
Four or more drinks	8	7	8	7	28	26	13

[a]"Last week"--last complete week before interview, beginning on Monday and ending Sunday night. Based on total sample, including nondrinkers.

[b]Less than one-half of one per cent.

than 20 per cent of either officers or men reported having anything to drink after 2000 on a day prior to a normal Monday-through-Friday duty day.

A substantially higher percentage of enlisted men (22%) reported having downed eight or more drinks on the prior Saturday, in contrast to seven per cent for the officers.

Repeating similar questions about specific drinking habits in a large-scale Navy study will make it possible to interrelate tendencies toward apparent excessive drinking and special conditions which stimulate or permit heavy drinking--such as lack of alternative recreational facilities, emphasis upon "happy hours" or other incentives to drink more heavily.

Drinking at Current Duty Station

Table 20 below presents the proportions of enlisted men and officers who report drinking more at their present duty station than at the last one, who report being high or tight six or more times at their present duty station, and who choose certain reasons as being important incentives for getting high or tight at their present stations. It is seen that relatively more of the junior enlisted men (33%) report drinking more at their current duty station than is true for the others, and that half the junior enlisted men reported having been high or tight six or more times while at their present duty station.

As to the reasons chosen as important in getting high or tight at their present station, enlisted men and officers showed somewhat different patterns. The enlisted men were more likely than the officers to mention reasons that imply a feeling of deprivation, such as "Drinking is just

TABLE 20

DRINKING AT CURRENT DUTY STATION BY PAY GRADE CATEGORY[a]
(In Percentages)

	Enlisted Men			Officers		
	Total (N=895)	Junior (N=559)	Senior (N=334)	Total (N=708)	Junior (N=455)	Senior (N=251)
Drinking more at present duty station than at last duty station.	26	33	16	22	21	22
High or tight 6 or more times at present duty station.	46	50	40	31	33	27
Reasons for getting high or tight at present duty station:[b]						
Frequent happy hours	7	8	5	15	17	12
Low happy hour prices.	9	11	7	12	15	7
Strong drinks here	8	9	6	8	8	8
Lots of private parties.	31	34	28	38	38	36
Low price by the bottle.	20	24	13	15	14	15
Drinking is about the only recreation here.	27	33	16	12	15	6
Because am very lonesome	17	23	7	5	6	4
Job makes me tense/nervous	21	22	18	12	11	14
Lots of unit parties	18	20	14	14	17	9
Celebrate lots of special occasions.	32	33	30	35	36	32

[a]Data on pay grades were unavailable for two enlisted men and two officers.

[b]Proportions of total in group who rated the reason "Very important" or "Fairly important." Multiple responses to this question were possible.

about the only recreation available here," "Because I am very lonesome here," and "Because my job gets me so tense or nervous that I need to drink to unwind." Both officers and enlisted men tended to stress social reasons and encouragement to drink as reasons for getting high or tight at their present stations: "Because we have frequent 'happy hours' here," and "Because we have lots of parties among Naval personnel here," although the latter was mentioned rather frequently also by enlisted men.

The next Chapter will illustrate how drinking at current duty station tends to vary by type of locality.

Opinions About Drinking in the Navy

The perceptions of men in the Navy concerning drinking among Naval personnel are important both in demonstrating that there is a fairly high rate of heavy drinking in the armed forces, and in establishing whether there exist stereotypes about who are the heavy drinkers in the Navy: stereotypes which may have an influence on the effectiveness of future programs to control excessive drinking. Table 21 provides data on the opinions of officers and enlisted men on whether they think the percentage of men with drinking problems is higher in the Navy than among civilian men of the same age and which groups within the Navy are seen as having an above-average percentage of problem drinkers.[12]

Sixty-one per cent of the enlisted men and 44 per cent of the officers expressed the opinion that the percentage of Navy men with drinking problems was higher than among civilian men of the same age. (Not shown in the table is the additional finding that only ten per cent

[12]The questionnaire (see Appendix C) defines those with a "drinking problem" as being "men who drink so much that it hurts their duty performance or some part of their personal life."

TABLE 21

OPINIONS ABOUT DRINKING IN THE NAVY BY PAY GRADE CATEGORY[a]
(In Percentages)

Opinions About Drinking	Enlisted Men			Officers		
	Total (N=895)	Junior (N=559)	Senior (N=334)	Total (N=708)	Junior (N=455)	Senior (N=251)
Percentage of men with drinking problems in Navy is much or somewhat higher than among civilian men of the same age . . .	61	67	51	44	48	37
Estimates that group has a larger percentage of men whose drinking hurts duty performance or personal life (compared to Navy as a whole):[b]						
In remote overseas areas accompanied by dependents.	19	14	27	30	27	36
In nonremote overseas accompanied by dependents.	6	5	9	8	7	9
In remote areas unaccompanied. . . .	82	80	87	90	91	90
In nonremote areas unaccompanied . .	62	59	68	70	70	70
Aviation personnel	10	11	8	35	34	38
Medical/dental	5	5	5	3	3	3
Surface-vessel personnel when ashore	58	62	53	41	45	33
Submarine personnel when ashore. . .	57	59	55	35	39	27
Staff personnel in general	16	18	13	21	19	24
Junior enlisted men (E-1 through E-4)	28	32	22	25	28	20
Enlisted men E-5 and E-6	38	42	31	26	28	22
Senior enlisted men (E-7 through E-9)	47	47	47	50	50	51
Junior officers (O-1 through O-3). .	10	8	12	12	13	11
Warrant officers	20	18	23	27	24	32
Senior officers (O-4 and higher) . .	20	16	27	30	29	31
Enlisted men on liberty from a ship	75	78	71	76	79	71
Officers on shore leave from a ship	41	38	45	56	57	52

[a]Data on pay grades were unavailable for two enlisted men and two officers.

[b]Multiple responses to this question were possible.

of both officers and enlisted men were of the opinion that the percentage of men with drinking problems was lower in the Navy.)

Majorities of both officers and enlisted men guessed that the following groups had a higher-than-average share of problem drinkers: men in remote areas overseas not accompanied by their dependents, and also in nonremote areas when not accompanied by dependents; and enlisted men on liberty from a ship (a majority of officers also rated "Officers on shore leave from a ship" as having an above-average percentage who drink enough to hurt their duty performance or some part of their personal life). In contrast, enlisted men were more likely than officers to point the finger at surface-vessel and submarine personnel when ashore.[13]

Although it was shown earlier that the junior enlisted men actually had the highest rate of self-reported drinking problems, the senior enlisted men (Chief Petty Officers, grades E-7 through E-9) were singled out more often by both enlisted men and officers as the grade level containing the largest percentage of men with drinking problems. Among the various reasons for this disparity is the possibility that Naval personnel themselves are better judges of where drinking problems are concentrated than are revealed in the data on consequences in the survey; or that the Chief Petty Officers are the victims of outdated stereotypes about hard-drinking CPOs, or that when CPOs do have drinking problems, they are more visible to both the officers and the enlisted men than the problems of others of higher or lower ranks. A future larger-scale survey can do much to explore the reasons that may lie

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[13]It is obvious that some of the categories overlap, e.g., "surface-vessel personnel when ashore," and "enlisted men on liberty from a ship."

behind these stereotypes, and how opinions on such matters may be topics for future information and education programs.

Attitudes and Values Concerning Drinking and Intoxication

Many questions were asked about attitudes toward getting drunk and about the importance of alcohol in one's life. These are presented in Tables 22, 23, and 24.

In Table 22, it is shown that enlisted men and officers differ rather sharply in their rate of agreement on "It's all right to get drunk whenever you feel like it," and "I enjoy getting drunk once in a while," with the enlisted men voicing a higher level of approval than do the officers. However, enlisted men and officers were similar in their fairly high rates of permissiveness concerning intoxication ("It's all right to get drunk once in a while as long as it doesn't get to be a habit," "Getting drunk occasionally is a good way to blow off steam," and "Most of my friends don't mind a person getting drunk if he doesn't do things that disturb other people").

However, there is one encouraging note about the findings in Table 22: very small percentages expressed intolerance for nondrinkers by agreeing with the statement that "People who don't drink at all are usually not much fun to be around."

Table 23 shows that about four out of ten of both enlisted men and officers rate "Having a drink such as a highball or cocktail or some wine or beer" as being very or fairly helpful when they are depressed or nervous: thus drinking is rated higher as a palliative than eating, taking a tranquilizer or other medicine, going to church or saying a prayer, or just trying to forget about it.

TABLE 22

VIEWS ON DRINKING AND INTOXICATION BY PAY GRADE CATEGORY[a]
(In Percentages)

Responded "True"[b]	Enlisted Men			Officers		
	Total (N=895)	Junior (N=559)	Senior (N=334)	Total (N=708)	Junior (N=455)	Senior (N=251)
It's all right to get drunk whenever you feel like it	27	33	18	11	14	5
It's all right to get drunk once in a while as long as it doesn't get to be a habit	73	76	67	61	69	45
No matter how much I like a person, I hate to see him drunk	44	39	54	47	40	61
I enjoy getting drunk once in a while	61	64	56	46	54	32
Most of my friends don't mind a person getting drunk if he doesn't disturb other people	84	86	81	78	84	67
I often feel guilty about my drinking	20	21	18	14	12	16
A party isn't a party unless drinks are served	31	32	28	34	33	36
People who don't drink at all are usually not much fun to be around	12	11	16	15	14	17
Getting drunk occasionally is a good way to blow off steam	44	44	45	42	48	30

[a]Data on pay grades were unavailable for two enlisted men and two officers.

[b]Multiple responses to this question were possible.

TABLE 23

ACTIVITIES HELPFUL WHEN DEPRESSED OR NERVOUS BY PAY GRADE CATEGORY[a]
(In Percentages)

Activities Very or Fairly Helpful When Depressed or Nervous[b]	Enlisted Men			Officers		
	Total (N=895)	Junior (N=559)	Senior (N=334)	Total (N=708)	Junior (N=455)	Senior (N=251)
Smoking	46	49	41	34	34	34
Eating	26	28	21	28	28	28
Having a drink such as a highball or cocktail or some wine or beer[c]	43	44	41	45	47	40
Working harder than usual either on duty or off duty	57	54	61	68	67	71
Taking a tranquilizer	6	6	6	7	5	10
Taking some other kind of pill or medicine	7	9	3	3	3	4
Going to church or saying a prayer	32	35	25	44	43	47
Talking it over with a friend or relative	75	78	72	81	85	73
Just trying to forget about it	35	37	33	35	35	34
Taking part in active exercise	62	65	57	79	82	73

[a]Data on pay grades were unavailable for two enlisted men and two officers.

[b]Multiple responses to this question were possible.

[c]Also forms part of the "Psychological Dependence" potential problems scale.

Table 24 shows that both officers and enlisted men put greater emphasis on social reasons for drinking than on reasons implying a need for escape, although the enlisted men are at least slightly more prone than officers to select escape reasons. (The outstanding "social" reasons are "I drink to be sociable," "Because the people I know drink," "To celebrate special occasions," and "I accept a drink because it is the polite thing to do in certain situations." The principal "escape" reasons are "I drink when I want to forget everything," "A drink helps me to forget my worries," "A drink helps cheer me up when I am in a bad mood," "I drink because I need it when tense and nervous," "A drink can help me feel better when I am not feeling well," "A drink helps me when I am lonesome," and "I drink when I have nothing else to do.") It is commonly believed among alcohol researchers that drinking for "escape" reasons is more likely to lead to undue dependence upon alcohol than drinking for "social" reasons.

Treatment and Education About Alcohol Problems

Table 25 presents findings for enlisted men and officers on whether they believe they themselves have a drinking problem, whether they have ever sought help for drinking problems, and which treatment auspices would appear to be best if they were referring a friend to someone for help with a drinking problem. Only a handful (4% of enlisted men, 2% of the officers in this pilot study) reported that they themselves needed help with a drinking problem, despite the finding (Table 22) that 20 per cent of enlisted men and 14 per cent of the officers had reported that "I often feel guilty about my drinking," and despite the earlier finding (Table 14) that 39 per cent of the

TABLE 24

REASONS FOR DRINKING BY PAY GRADE CATEGORY[a]
(In Percentages)

Reason Rated as Very or Fairly Important Reason for Drinking[b]	Enlisted Men			Officers		
	Total (N=895)	Junior (N=559)	Senior (N=334)	Total (N=708)	Junior (N=455)	Senior (N=251)
To help me relax	47	48	46	54	53	55
Because I like the taste	63	68	56	75	76	73
I drink to be sociable	60	61	59	76	75	78
Because the people I know drink	25	24	25	37	39	35
When I want to forget everything[c]	13	17	7	6	6	6
To celebrate special occasions	77	77	75	82	84	79
Helps me forget my worries[c]	18	21	13	14	14	14
Polite thing to do in certain situations	55	54	55	62	63	61
Helps cheer me up when I am in a bad mood[c]	31	34	26	24	23	24
Because I need it when tense and nervous[c]	18	20	16	16	16	18
Helps me feel better when I am not feeling well	16	15	16	11	10	14
Can help me think and work better	7	8	5	2	2	1
Helps me gain self-confidence	20	23	16	21	22	18
Helps me when lonesome	26	30	19	17	18	15
When have nothing else to do	25	27	21	13	13	13
Drinking helps me in my relationships with women	18	21	14	16	19	11

[a]Data on pay grades were unavailable for two enlisted men and two officers.

[b]Multiple responses to this question were possible.

[c]These items also form part of the "Psychological Dependence" potential problems scale.

TABLE 25

TREATMENT FOR ALCOHOL PROBLEMS OF SERVICE PERSONNEL BY PAY GRADE CATEGORY[a]
(In Percentages)

Treatment for Alcohol Problems	Enlisted Men			Officers		
	Total (N=895)	Junior (N=559)	Senior (N=334)	Total (N=708)	Junior (N=455)	Senior (N=251)
Needs help with a drinking problem . .	4	3	4	2	-[b]	4
Have tried to get help for a drinking problem.	2	2	3	1	1	2
Very or Fairly good place for friend with drinking problem to go for help:						
A civilian doctor.	69	74	61	77	80	72
Civilian minister, priest, or rabbi	70	71	70	74	75	72
Alcoholics Anonymous	92	89	96	96	95	99
A military doctor.	74	74	74	81	85	73
A service chaplain	72	73	70	75	76	73
His commanding officer	47	45	51	50	48	54
A service alcoholism treatment facility	88	87	90	90	91	90
Agree with following statement:[c]						
Naval personnel afraid to get help through Service	69	66	74	77	77	77
Naval personnel successfully treated for alcoholism should be assigned and promoted like everybody else	88	88	88	86	89	82
Navy should ease alcoholics out of Service without wasting time and money on them	8	8	8	8	7	10

[a]Date on pay grades were unavailable for two enlisted men and two officers.

[b]Less than one-half of one per cent.

[c]Multiple responses to this question were possible.

enlisted men and 23 per cent of the officers had reported some adverse consequences to themselves from their own drinking within the last three years. This finding underscores the tendency toward denial of drinking problems where they exist, as does the finding that only two per cent of the enlisted men and one per cent of the officers reported they had tried to get help for a drinking problem.

Most of the resources for treatment presented in this survey (civilian doctors, clergymen, Alcoholics Anonymous, military doctors, service chaplains, and "A service alcoholism treatment facility") were rated by large majorities as good places to send a friend who needed help for a drinking problem. (The commanding officer was less often rated as a good source of help, although about half rated this as at least a fairly good place to go.)

One of the reasons why there tends to be strong reluctance among problem drinkers to seek help through military channels is seen in the finding (Table 25) that 69 per cent of the enlisted men and 77 per cent of the officers in this pilot study agreed with the statement that "Naval personnel with drinking problems usually do not try to get help through Service sources because they are afraid of damaging their careers." However, those responsible for treatment and prevention programs should take encouragement from the finding that almost nine out of ten agreed with the statement that "If Naval personnel have been successfully treated for alcoholism, they should be handled like anybody else in terms of assignments and promotions," and less than ten per cent agreed with the statement that "The Navy should not waste time and money on treating alcoholics, but should ease them out of the service as humanely as possible."

About two-thirds of all respondents indicated that they had ever received information from Navy movies or film strips, lectures or talks, or pamphlets or written materials (Table 26), indicating a fair level of exposure to such preventive campaigns,[14] at least at the four installations covered in this pilot study. However, as in civilian studies, there is still much confusion about how to regard alcoholism: while 71 per cent of the enlisted men and 82 per cent of the officers agreed with the statement that "Alcoholism is a disease," large proportions also agreed with the statement that "Alcoholism is basically a sign of moral weakness" or expressed the opinion that "Alcoholism is mostly a habit like cigarette smoking."

These findings of evident confusion about the nature of "alcoholism" and its causes points to a need for further clarification of policies on how "alcoholism" and "problem drinking" should be defined and dealt with. While the position that "alcoholism is a disease" has been adopted by many authorities in the treatment field in the belief that it is the best tactic to get the chronic heavy drinker with medical complications the treatment he needs, the concept of "Problem drinking is drinking that hurts on-job effectiveness" would also seem valid from a policy standpoint. There is nothing essentially contradictory in these two concepts, but in practice they have tended rather to work at cross-purposes because the "alcoholic as a sick person" who needs compassion is hard to distinguish in a clear-cut way from the person whose alcohol-related ineffectiveness on duty is less chronic and therefore perhaps more amenable to being coped with through

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[14] A Navy film about alcohol abuse, "CNO SITREP 6," was widely shown in all four of the sites selected for the pilot study, just before the field work was conducted.

TABLE 26

INFORMATION AND OPINIONS ABOUT ALCOHOL PROBLEMS BY PAY GRADE CATEGORY[a]
(In Percentages)

Information and Opinions About Alcohol Problems	Enlisted Men			Officers		
	Total (N=895)	Junior (N=559)	Senior (N=334)	Total (N=708)	Junior (N=455)	Senior (N=251)
Recall Navy information about effects of drinking too much:[b]						
In movie or film strip	64	60	72	60	59	61
In lecture or talk	66	65	69	60	57	66
In pamphlet or written material	60	56	67	66	62	73
Which one definition of alcoholism comes closest to your own opinion:						
Like an allergy or physical condition some people born with	4	3	6	9	7	12
Mostly habit like cigarette smoking	48	47	49	39	39	38
Usually caused by social environment	26	28	23	19	21	16
Something else (write in)	19	20	16	31	30	33
Multiple answers	1	1	1	-[c]	-[c]	-[c]
No answer	3	2	5	2	3	2
Alcoholism is basically a sign of moral weakness	44	45	44	27	26	29
There is really no cure for alcoholism	12	11	12	13	13	13
Alcoholism is a disease	71	69	76	82	81	84

[a]Data on pay grades were unavailable for two enlisted men and two officers.

[b]Multiple responses to this question were possible.

[c]Less than one-half of one per cent.

other-than-medical means. While the concept "Alcoholism is a disease" may continue to be necessary in order to secure for some chronic problem drinkers the treatment they need, there appears to be a need also to clarify the extent to which heavy or inappropriate drinking which is not necessarily chronic or addictive is taking a toll in terms of days lost or "on-the-job absenteeism." Chronic alcoholism within the armed forces is presumed to be concentrated among those from 35 to 50 years of age; but the bulk of alcohol-related time loss and financial cost may well be caused by those under 35, to judge from the results of this pilot survey; and therefore somewhat different methods may be needed in dealing with these two groups. Larger-scale surveys can be helpful in future planning of preventive campaigns to cope with alcohol-related work performance on the one hand, and programs of early casefinding and treatment of potentially chronic alcoholism on the other.

CHAPTER VI

COMPARISON OF RESULTS FOR FOUR TYPES OF SAMPLE SITES

As discussed in Appendix A, the four localities chosen for this pilot study were selected rather arbitrarily to represent four types of presumed situations which might affect drinking behavior. One site (San Diego) was selected as a large stateside base in a fairly large city and thus relatively nonisolated. One (NAS Whidbey Island, Washington) was selected to represent a presumably more isolated stateside base. One (Yokosuka area) was chosen to represent an overseas assignment in a relatively nonisolated locale where many men have their dependents with them; and one (Guam) was chosen as a relatively isolated overseas assignment with necessarily limited travel and other recreational facilities.

There is no guarantee that the four localities are perceived by the majority of the Naval personnel stationed there in the same way as they are by those who selected the sites, as representing either isolation or nonisolation, since (for example) many of the men stationed at Whidbey Island lived off-station in civilian quarters, and most of those from the Yokosuka area lived in American enclaves which might be considered by some to be isolated in certain respects. Furthermore, as mentioned earlier, because the units chosen for sampling at each locality were selected more with an eye to convenience than to representativeness, there is no guarantee that the units chosen were necessarily representative of the total Naval units in the locality as a whole, although

samples were drawn from five to nine units at each locality. Even so, certain findings are here reported for each of the four localities, merely to illustrate how different localities may differ in drinking behavior: this type of information may be useful in the planning of a larger-scale Navy survey.

The findings are presented in Tables 27 through 29. In each instance, results are presented separately for officers and enlisted men at each locality.

Drinking Behavior and Drinking Problems

The "drinking typology" analysis (Table 27) shows that the sample drawn from Guam had the lowest incidence of drinking problems with consequences, although the four localities did not differ materially. At all four installations, the enlisted men had a materially higher incidence of drinking problems than did the officers.

In the specific types of problems (Table 28) tabulations for the four localities show Japan at least slightly in the lead for most problems or potential problems, particularly for heavy intake.

In increases in drinking and in frequency of intoxication since coming to one's present duty station, Japan and Guam (the two overseas units) materially outdistanced the two stateside installations (Table 29). In the same table, as explanation for the tendency to get high or tight at one's present station, it is seen that the reasons which emphasized sociability (the most popular reasons at all four installations) were even more often selected by Japan and Guam respondents. Examples: "Because we have lots of parties among Naval personnel here" and "Because we frequently celebrate special occasions (such as promotions,

TABLE 27

CURRENT DRINKING PRACTICES AND CONSEQUENCES BY LOCALITY
(In Percentages)

Current (Last Three Years) Problem Typology	San Diego			NAS Whidbey Island			Japan			Guam		
	Total (N=468)	Enlisted Men (N=247)	Officers (N=221)	Total (N=379)	Enlisted Men (N=194)	Officers (N=185)	Total (N=384)	Enlisted Men (N=249)	Officers (N=135)	Total (N=371)	Enlisted Men (N=203)	Officers (N=168)
Nondrinkers	2	4	1	3	3	3	3	3	4	3	3	2
Drank, no problems	27	22	32	27	21	33	23	17	35	25	20	30
Potential problems only (dependence, loss of control, symptomatic drinking, belligerence)	23	18	29	17	13	21	16	12	23	27	22	32
Heavy intake or binge drinking	16	17	16	22	26	18	22	27	14	17	19	14
High consequences score[a]	31	39	23	31	37	24	36	42	24	29	36	22
Total[b]	99	100	101	100	100	99	100	101	100	101	100	100

[a]Reported numerous unfavorable social consequences of drinking behavior (problems with wife, relatives, friends or neighbors, on the job, or with police) or health or injury or financial problems. (See Table 2.)

[b]Because of computer rounding, totals actually may vary from 99 to 101 per cent.

TABLE 28

SPECIFIC DRINKING PROBLEMS BY LOCALITY[a]
(In Percentages)

Specific Current Problems (Last Three Years)	San Diego			NAS Whidbey Island			Japan			Guam		
	Total (N=468)	Enlisted Men (N=247)	Officers (N=221)	Total (N=379)	Enlisted Men (N=194)	Officers (N-185)	Total (N=384)	Enlisted Men (N=249)	Officers (N=135)	Total (N=371)	Enlisted Men (N=203)	Officers (N=168)
Heavy intake	30	40	19	32	42	21	45	52	23	30	38	19
Binge drinking	10	17	3	9	13	5	11	16	-	7	11	3
Psychological dependence	8	12	7	8	12	3	10	11	8	10	13	7
Loss of control	11	15	7	9	10	8	12	15	7	13	16	8
Symptomatic drinking	23	30	16	23	30	16	27	35	12	25	30	18
Belligerence	21	27	14	18	22	15	28	34	17	22	30	13
Problems with wife	17	17	18	17	15	19	21	21	19	21	20	22
Problems with relatives	9	13	5	7	8	5	9	12	5	9	12	5
Problems with friends, neighbors	13	17	8	11	15	8	17	19	14	16	20	11
Job problems, total	9	14	4	7	10	4	11	14	5	15	16	6
Hurt chances for promotion	3	5	1	2	3	1	5	6	2	4	2	4
Lower score on efficiency rating	3	4	1	2	4	1	3	4	2	3	4	2
Court-martialed	1	1	-	-[b]	1	-	1	1	-	1	1	-
Received nonjudicial punishment	1	2	-	1	1	1	2	2	-	1	2	-
Off duty, sick for week or longer	-[b]	1	-	-	-	-	-[b]	-[b]	-	1	1	-
In hospital or infirmary	1	2	-[b]	1	2	-	1	1	-	1	1	-
Hard to function on job without a drink	3	4	1	2	4	1	2	2	-	4	6	1
High or tight on duty	11	16	5	7	11	3	14	20	3	10	16	4
Police problems	12	16	7	11	16	6	11	13	5	8	12	2
Financial problems	14	24	4	10	17	4	16	23	4	12	17	6
Health or injury problems	3	4	1	2	4	-	3	4	1	2	3	1

[a]Multiple responses to this question were possible.

[b]Less than one-half of one per cent.

TABLE 29

DRINKING AT CURRENT DUTY STATION BY LOCALITY
(In Percentages)

	San Diego			NAS Whidbey Island			Japan			Guam		
	Total (N=468)	Enlisted Men (N=247)	Officers (N=221)	Total (N=379)	Enlisted Men (N=194)	Officers (N=185)	Total (N=384)	Enlisted Men (N=249)	Officers (N=135)	Total (N=371)	Enlisted Men (N=203)	Officers (N=168)
Drinking more at present duty station than at last duty station	17	17	18	11	14	8	37	41	28	34	32	36
High or tight 6 or more times at present duty station	36	37	34	35	41	28	48	60	26	41	36	35
Reasons for getting high or tight at present duty station:[a]												
Frequent happy hours	13	11	15	11	6	16	6	4	8	12	5	20
Low happy hour prices	12	13	11	8	6	11	8	8	9	12	8	17
Strong drinks here	7	8	7	5	3	8	8	8	7	12	13	10
Lots of private parties	26	22	30	32	28	37	42	42	40	39	33	46
Low price by the bottle	7	8	5	3	5	2	33	37	25	30	27	33
Drinking is about the only recreation here	11	16	5	19	21	16	24	32	10	28	37	17
Because am very lonesome	13	19	6	9	12	5	12	15	5	15	23	4
Job makes me tense/nervous	17	23	11	15	17	12	20	22	15	16	20	12
Lots of unit parties	13	13	13	16	18	15	17	22	8	19	20	19
Celebrate lots of special occasions	29	26	33	31	29	32	39	42	34	35	31	35

[a]Proportions of total in group who rated the reason "Very important" or "Fairly important." Multiple responses to this question were possible.

retirement, etc.)." The low price of alcoholic beverages was a much more popular reason in Japan and Guam than in the two continental stations; and, at least among enlisted men, those at the overseas bases were more likely then those at San Diego or Whidbey to allege that "drinking is just about the only recreation available here."

In summarizing these preliminary tabulations of the data from the four localities covered in this pilot survey, it must be said that while some differences were found among the four installations those differences seemed to be more related to the patterns of consumption and to the motives for excessive drinking (Table 29) than to the probability of suffering identifiable adverse consequences (Table 27).[15]

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[15]The full-scale survey of drinking practices throughout the Navy should shed considerable light on what types of conditions tend to foster, and which tend to discourage, a high rate of heavy drinking. In that projected study, safeguards will be taken (as in this study) that the findings will not be utilized in an IG-type "investigation" of the incidence of problem drinking within specific localized commands.

CHAPTER VII

RECOMMENDATIONS FOR FURTHER RESEARCH STUDIES

Need for Research and Evaluation

The specifications for the pilot study here reported included the following major requirement that the study:

> Recommend a major research plan to assist in accomplishment of Bureau of Naval Personnel Alcohol Abuse Control Program objectives, which are:

1. to remove the stigma surrounding alcoholism, to eliminate alcoholism from misconduct status and to achieve general acceptance of it as an illness in order to bring it out in the open where it can be treated.

2. to teach line supervisory personnel how to detect alcoholism in its early stages and how to induce the alcoholic to accept treatment.

3. to acquaint the supervisory personnel with the treatment facilities available, both Navy and civilian, and how best to utilize them.

4. to acquaint the medical personnel with the most effective methods of treating alcoholism.

5. to provide adequate and proper treatment facilities for alcoholics.

6. to modify the attitudes and habits toward drinking among Naval personnel in order to promote responsibility in their drinking habits.

7. to modify the attitudes of Naval personnel and Navy policies toward the recovered alcoholic.

The results of this preliminary pilot study document the time lost to the Navy through absence or through impairment of on-duty effectiveness caused by misuse of alcohol. The preliminary documentation

here of the loss of a substantial percentage of duty time because of excessive drinking certainly bears out the prior estimates of the magnitude of the problem prepared by Control Program personnel:

> Applying a conservative estimate of 5% alcoholism incidence to an end Navy personnel strength of 600,000 men translates to a minimum of 30,000 individuals suffering from alcoholism, including early stage alcoholics often difficult to differentiate from "heavy drinkers". Industry estimates an annual cost per alcoholic due to lost time, poor work, bad decisions, etc., to be $1,500 to $4,000. Using the lower figure this would amount to a minimum loss to the Navy of $45,000,000 annually. The minimum loss of $45,000,000 in poor performance does not include other related costs such as medical and psychiatric treatment, disciplinary processing and confinement, dissention among co-workers, physical suffering, family break-up, etc., which also can be excessive.[16]

Thus the evidence from this pilot study, when combined with evidence from other sources, indicates that the Navy's problem with excessive use of alcohol is a considerable one, and that substantial savings in costs and increases in effectiveness might be realized by the introduction of appropriate remedial programs. However, information to design the right kind of program mix has not yet been developed.

On the one hand, even the evidence from this pilot study (limited as it was to four installations) indicates that the problem is a most deep-seated and complex one. Since most Naval personnel drink, and many drink very heavily upon occasion, it appears unlikely that a massive attempt to promote abstinence would be effective. The findings also suggest that the Navy has a good many fairly advanced problem drinkers who would react negatively to appeals to define themselves as incipient "alcoholics" who should avoid alcohol. This pilot study reveals much confusion about the identity of the

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[16]Tab A in Semi-Annual Situation Report for CNO on Human Resource Development project, Fall 1972.

"problem drinker": although the findings clearly show that the rates of problem drinking of most types are much higher among the junior enlisted men than among any other groups, there was a pronounced tendency of most groups covered in this pilot survey to see the problem as occurring most often among fairly senior enlisted men. Even though the definition of the problem drinker was most explicit in the pilot survey questions (" . . . men who drink so much that it hurts their duty performance or some part of their personal life"), there appeared to be a tendency to think of the problem drinker as being the type of older man who is a candidate for institutional treatment as an alcohol addict.

Since many Navy men do drink to the point of getting into at least temporary difficulty over their drinking, there may be a widespread tendency to deny one's own drinking problems by pointing to the candidate for skid row as the definition of the true "problem drinker." There appear to be at least two problem-drinking populations which are easily confused: the (often temporary) drunkenness offender and the addictive alcoholic. In short, we can isolate several kinds of "problem drinkers" which differ sufficiently that it may not be possible to design a single treatment or preventive program to deal equally effectively with all of them. Thus there appears to be an urgent need for a continuing research and evaluation program to assist program planners in their development of strategies for dealing with these complex problems, and in assessing the effectiveness of alternative educational, preventive, and treatment approaches.

There are a number of factors which lend encouragement to the belief that effective means can be developed for dealing with drinking problems within the Navy. One factor is an apparent increase in top-level interest in programs to cope with alcohol problems at the DOD level, within the individual Armed Forces, and in outside industry: the need for more effective personnel policies and practices regarding problem drinking is an idea whose time has come. The shift of the Armed Forces to an all-volunteer force and to the greater utilization of women in the services also will make Naval management personnel more receptive to new approaches to the old problem of excessive drinking. Another encouraging sign comes from the findings of this pilot study itself: while a large proportion of this small sample at present have misgivings about Naval personnel with drinking problems being able to get help through Service sources without damaging their careers, many of the respondents in this survey are sympathetic concerning the need for treatment of the problem drinker within the Service, and do not favor throwing him out automatically.

The research and evaluation requirements believed necessary for the carrying out of an effective continuing program of education, prevention, control, and treatment of alcohol problems within the Navy are seen as having three interrelated objectives: (1) to conduct baseline studies to establish the magnitude and distribution of drinking problems (and relevant opinions and attitudes about control programs) within the Navy, (2) to conduct before/after assessments of the effectiveness of educational and preventive measures, and (3) to evaluate the relative effectiveness of alternative or complementary methods of treatment of alcoholics. In reading the research recommendations below, it should be

borne in mind that the research program should be planned to be sufficiently flexible to permit modification in the light of new knowledge or changed circumstances within the Navy: thus the total research plan itself should be reevaluated at intervals.

Baseline Studies

The conducting of a number of quantitative descriptive surveys is considered important in determining goals, strategies needed to implement goals, and baselines against which to measure effectiveness in meeting the goals of education, prevention, treatment, and rehabilitation. These surveys could have a common core of measurements in various areas, to permit comparison among groups and against the civilian population where relevant: the common core of items would include questions about drinking behavior and drinking problems, opinions on the treatment of problem drinking and of alcoholism among Naval and ancillary personnel (including overseas civilian employees and dependents), with collateral items of a background nature in order to measure the correlates of various types of drinking behavior and attitudes. It is recommended that surveys be conducted among the following groups: (1) Naval personnel in uniform, (2) Naval civilian employees at overseas installations, (3) dependents of Naval personnel, and (4) line supervisory personnel concerned with alcohol problems. These will be discussed in turn.

Survey of Naval personnel in uniform.--Such a survey of attitudes, values, and behavior concerning problem drinking and what (if anything) the Navy should do to cope with excessive drinking could be conducted immediately, using the pilot survey as a base. It is believed

that the content of the pilot survey (see Appendix C) covers most of the content that would be required in such a survey. Somewhat more emphasis should be given to detailed questioning on opinions about programs to cope with excessive drinking, in order to get a more detailed picture of where cooperation and resistance or misunderstanding of alcohol control programs is strongest. This large-scale baseline study obviously should include women in the Navy, as the pilot study did not.[17]

This pilot study has established conclusively that by-mail methods can be used successfully in surveys of military personnel. The controlled experiment described in this report demonstrates that given sufficient care in the specific techniques used, the by-mail method yields findings at least as valid and reliable (if not more so) than the widely accepted field-administered method, at a fraction of the cost.

It is believed that a Navy-wide sample of from 5,000 to 10,000 officers and enlisted personnel should be covered in this large-scale baseline survey, in order to permit the gathering of adequate subsamples for all groups of primary interest. One special advantage of the by-mail technique is the feasibility of applying differential rates of sampling to different groups (depending upon their rarity and importance) so that it is possible to report, for example, on the attitudes and behavior of such small-number sub-groups as middle military personnel managers, or of Chief Petty Officers in the Pacific area, or of

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[17]Several female Naval officers participated in the Norfolk pretest of the pilot study. They expressed keen interest in the implications of the survey, and the wish that it would be conducted among women in the service.

Naval Aviators of certain ranks, if such be desired. It is readily possible, with the use of by-mail sampling, and the use of central personnel computer files to utilize such differential sampling whenever desired, and then simply to apply differential weights to aggregate Navy-wide findings. In field-administered sampling, it is rather difficult to resort to sophisticated stratification and differential sampling, given the pressures of sampling in the field.

The time and costs required for a definitive baseline Navy-wide survey will depend upon whether new survey content might require additional development work and pretesting, and upon the degree of detail required in the analysis. It is likely, however, that such a survey of 5,000-10,000 Navy men and women in uniform could be conducted within a nine months time span, plus sufficient time to permit development of a female version of the questionnaire if, indeed, such a special version appears, after appropriate exploration, to be required.

Survey of Navy Department civilian employees.--Because environmental factors are so influential in establishing attitudes and behavior concerning drinking, it is only reasonable to assume that Navy Department employees have attitudes and behavior related to alcohol that are closely parallel to the uniformed personnel whom they resemble most closely in education and age. Since we have seen that this pilot survey of Naval uniformed personnel has revealed a fairly high rate of problem drinking and a fairly permissive attitude toward heavy drinking, it is reasonable to expect that a study of Navy Department employees will produce similar findings. In overseas locations, the Navy has medical responsibility for civilian personnel and should therefore conduct such studies as part of its planning for medical and rehabilitative programs; stateside,

the Navy's interest in studying this group is primarily one of learning about alcohol-related problems in job effectiveness among this segment of the Navy work force.

A baseline survey on Navy Department civilian employees would be highly useful in determining both the incidence and character of their drinking problems and also their receptivity for prevention and treatment programs. It could be conducted parallel to the in-service survey described above. The size of sample will depend upon the amount of detail wanted in the analysis, e.g., data on civilians in various theaters, with various kinds of duties, and of various grades. If the questionnaire and analysis were quite similar to the survey of uniformed Naval personnel, and if thus no extensive period of additional pretesting would be required, such a survey could be completed at the same time as the service-wide study of uniformed personnel.

Dependents of Naval personnel.--Alcohol-related attitudes and behavior of wives and other dependents of Naval personnel can be assumed to have a pronounced effect upon the attitudes and behavior of those in the service. The Navy has a reason to be officially concerned about the drinking behavior of dependents when such behavior reflects upon the Service (particularly in overseas areas), and also because the government has an obligation to provide medical services for many dependents. Little has been done in the way of studies of drinking behavior and attitudes of dependents of armed forces personnel, partially because such a study might risk imposing upon the individual's right to privacy. However, it is believed that such a study can be presented and structured without invasions, and it is recommended that a survey of dependents be conducted parallel to the survey of Naval personnel. Such a survey,

however, may require personal interview rather than administration by mail.

Additional pilot-testing would be necessary before launching the dependent survey. It is believed that six months would suffice for such testing, with a final survey of dependents to be completed and reported within an additional nine months.

Survey of middle management personnel.--Middle management's attitudes and expectations and motivations can make or break almost any program in the Armed Forces, because effective application of personnel programs is largely dependent upon how well the supervisors carry them out. In this regard the Navy is no different from large-scale civilian organizations, where middle management is the crucial managerial level for program implementation. To the extent that the content of the by-mail questionnaires of military personnel and Navy Department civilians described above is found to cover the behavior and attitudes of "middle management" adequately, supervisors could be covered merely through supplementary samples in these other questionnaire surveys. However, it is likely that there will remain some topics that are too sensitive or too complex to be covered in such a survey, and that there may be a limited group of key supervisors to be brought into program planning in a more intensive way than is possible in a quantitative survey. Special samples of middle managers should be selected and their views sought through personal interviews or panel or group interviews. Further discussions with the Bureau of Naval Personnel representatives will be needed to determine whether such a special personal interview survey of line supervisors should precede, parallel, or follow the quantitative coverage of middle management

through the questionnaire studies of uniformed and civilian personnel discussed above. If such a special personal interview survey is conducted, it could be completed within nine months to one year after its inception.

Assessment of Educational and Preventive Campaigns

The principles of before-after assessment of the effectiveness of informational and educational campaigns within the Armed Forces have been well set forth in Vol. III of Studies in Social Psychology in World War II. Obviously, it is impossible to gauge the effectiveness of a campaign unless there are baseline and follow-up studies to measure changes attributable to the program. The extent and magnitude of such assessment of program effectiveness should be highly dependent upon the volume and costs of the campaigns themselves. Too often little or nothing is set aside in the way of budgets for research to evaluate the effectiveness of educational campaigns. In view of the controversial nature of how one goes about influencing such deep-seated issues as attitudes and behavior related to drinking among military personnel, it is not possible at this stage to set up a concrete program of specific studies with specific budgets. However, it is possible to discuss some of the dimensions of appropriate assessment programs, which generally lend themselves to this sequence of evaluation and assessment:

Baseline and before-after assessment studies.--Baseline studies can be accomplished in a general way through the baseline service-wide survey described above. If experimental education and prevention programs are to be launched, it is usually well to confine their scope to a limited number of test localities, and then to do before-after

measurements at these specific localities. Such limited tests can be done through a combination of small-group panels during program development, followed by self-administered questionnaires of as few as 200-400 persons for controlled "before" or "after" studies, to measure the correlates of changes in attitudes and behavior in individuals.

General follow-up studies.--At intervals after the launching of any Navy-wide information and control program, broad-scale surveys of information and attitudes should be conducted to see if there have been any material changes attributable to either the campaign or all other influences occurring over time. Since it has now been established that one can administer large-scale self-administered questionnaires by mail, the costs of such studies should be low enough to permit such an assessment at intervals of two or three years.

As noted below, the high rate of turnover or movement of individuals into and out of different assignments within the military, and of movement into and out of military life itself on the part of noncareer enlisted men, presents special challenges in reflecting such changes in research among military personnel. Particularly at a time when the characteristics of Naval personnel and their assignments are changing so drastically, and particularly during the earlier stages of the projected all-volunteer defense force, periodic across-the-board sampling surveys of drinking behavior and attitudes should be conducted to determine the extent and direction of change in drinking practices, and how such changes may be related to other changes occurring within the Navy.

Before-after studies in a changing population.--Longitudinal studies, in which the same individuals are followed up at intervals

over a period of years, constitute an important research method in studying the development of such often-chronic conditions as alcoholism, because such longitudinal studies are the only conclusive way of determining which types of individual characteristics interact with which types of environmental conditions in leading to what types of physical and mental health outcomes over a period of years. Such longitudinal studies are now being conducted among civilian populations by the authors of this report. However, military populations present special limitations in the carrying out of a longitudinal study, because of the rapid rate of rotation in assignments: tours of duty in a single locality of more than two years are relatively rare in the Navy; and at the present time many noncareer enlisted men serve relatively short single enlistments and are back in civilian life within a few years. Therefore, the longitudinal study within military service is of primary usefulness in studying career officers and enlisted men. Further, since lengths of assignment to a specific station are generally so brief, the design of analysis for longitudinal studies within the Armed Forces must differ somewhat from the design of civilian longitudinal studies in that it is not possible to put as much emphasis upon the immediate environment in military studies.

Despite these limitations, there are a number of offsetting advantages in conducting longitudinal studies among military personnel. One is that more permanent, centralized personnel records are available for study. Another is that conditions of military discipline make possible better cooperation of respondents in longitudinal studies, and would even make possible a scientific randomization in assignments in long-term controlled experiments. Thus it would be possible (for

example) to study the relative effectiveness of former problem drinkers under alternative modes of treatment and subsequent assignment. Accordingly, the utilities of such longitudinal studies in the Navy (some of which could be conducted on an in-house basis) should be kept in mind in long-term planning of research programs.

Policy studies.--In this category fall such problem-solving approaches as the intensive small-group conference, panels of consultants, and panels of top and middle military personnel managers. Here the respondents are approached as interested and informed consultants more than as objects for scrutiny. Policy studies on what programs should be given priority and how they should be implemented should be a continuous process: before policies are finalized and practices are devised, and while programs are being carried out. Not only are such studies highly effective means of learning about resistances to programs and how to cope with them, but also the fact that such studies are being conducted is often an effective way of improving relations between those who plan the policies and those who are to carry them out. Such policy studies can be small-scale in nature; and some can be done better in-house (with outside counsel) than from the outside. At the present time, it is difficult to recommend the scope of such policy studies. However, since feedback of some type from the field managers to the policy planners is (or should be) going on in any case, it is possible that very little more in the way of costs would be involved in modifying the present feedback processes to serve the function of these kinds of policy studies.

Nonsurvey statistical studies.--Under this category come such indices of presumed changes in behavior as changes in the serious-incident

rates, and changes in alcohol-related accident or medical treatment rates. While care needs to be taken in interpreting such statistics because of artifacts (e.g., when campaigns result in a change in the ways in which accident or treatment rates are reported), they can provide a useful collateral means of checking on changes in problem-drinking behavior. These kinds of data can often be analyzed by in-house Naval personnel, with assistance from outside consultants. It is likely that the alcohol program administrators intend to handle much of this type of analysis on an in-house basis, as they have done in the past.

Assessment of Treatment Effectiveness

Study of the effectiveness of in-Service treatment of Naval personnel for alcoholism is, of course, going on now, in terms of in-house follow-up studies of eventual disposition of cases as improved and restored to duty, improved but left the service, and unimproved and resigned or retired or discharged. Probably much of the continuing measurement of effectiveness of treatment will continue to be done in-house with the aid of outside consultants, although certain types of evaluative studies are best done by outside specialists in order to insure both the substance and the appearance of objectivity. Such assessment, like the assessment of preventive and educational campaigns, should be conducted to cover various stages and aspects of treatment programs. Thus there is need for policy studies to determine which types of programs might be most effective, for baseline studies (such as on the average age and condition of personnel admitted for treatment when programs begin, and whether there is a shift toward earlier

identification and treatment as the program develops), for follow-up studies through interviews of those treated and interviews of their supervisors, and for nonsurvey statistical studies to determine the proportion and characteristics of those treated who were returned to effective duty.

As for policy studies: since there is vast disagreement within the civilian alcohol treatment community as to the relative effectiveness of various treatment modalities (and even much uncertainty as to criteria for recruitment into treatment programs, as well as criteria for what constitutes effective outcomes), the Navy would be well-advised to commission a staff study to define the problems of criteria and methods of effective treatment so that Navy policy planners can choose the criteria and treatment modalities best-adapted to the Navy's own needs. The National Institute on Alcohol Abuse and Alcoholism of the Department of Health, Education, and Welfare should be most cooperative in making available to the Navy the findings of any studies it may be conducting along these lines.

As for baseline and follow-up studies of program effectiveness: we believe the Alcohol Abuse Control Program should continue to develop its own in-house capability for conducting the evaluations which are necessary for day-to-day program planning and modification. Such an evaluation unit could conduct its own small-scale studies as needed, calling upon outside consultants or research organizations to conduct the studies that are too complex or controversial to be handled by the in-house assessment group. Evaluation experts are increasingly of the opinion that for optimum program effectiveness, there is need for in-house assessment resources to respond to internal needs for day-to-day

information necessary for meeting the tactical needs of programs, and there is also need for objective external evaluative resources from time to time to establish whether broad issues of strategy as well as important tactical considerations are being handled effectively.[18] The staff of the Bureau of Social Science Research will be glad to serve in an advisory capacity to assist in the planning and staffing of in-house assessment activities, as well as in the design of evaluative studies to be conducted by outside organizations.

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[18]Carol H. Weiss, Evaluation Research: Methods of Assessing Program Effectiveness, Prentice-Hall, Englewood Cliffs, N.J., 1972.

APPENDIX A

DETAILS OF SAMPLING AND FIELD PROCEDURES

Pretest of Questionnaires and Field Procedures

Prior to conducting the full-scale pilot study to measure the relative effectiveness of two methods of survey administration (by-mail and field-administered), an extensive pretest of the questionnaires and practice sessions for field administrators were conducted in the Norfolk area during August, 1972. These pretests involved administration of the questionnaires to 99 enlisted men aboard a submarine tender and to 30 officers at CINCLANTFLT headquarters. The procedures of administration closely followed the standard procedures worked out for The American Soldier during World War II: administration of the questionnaires in a larger group for the enlisted men, and in smaller groups or individually for the officers. The samples were drawn randomly from the rosters of the units concerned and conformed closely to usual standards for final field studies, except that for the purposes of this pretest it was considered appropriate not to insist very strongly on the participation of a selected individual if the interruption of his work was considered by his superiors to be disruptive of ongoing operations.

The briefings of respondents followed the traditional pattern: summarization by the field administrator of the main points from the first page of the questionnaire (see Appendix C): that the survey was being conducted to find out the facts about Naval personnel's attitudes and experiences related to drinking practices and drinking problems; that their help was solicited in improving the questionnaire through this pretest; that they had been selected at random; and that the

questionnaire responses were to be kept anonymous. In addition, each respondent filled out a rating sheet concerning the clarity and fairness of the questions and noted any suggestions he might have for improvement in the questions. When each respondent finished filling out the pretest questionnaire and rating sheet, a member of the field team discussed his suggestions with him and also flipped through the questionnaire with him to note any omissions or obvious inconsistencies so that the respondent could correct them if he wished to do so.

Most of the men in this pretest rated the questionnaires as clear and sufficiently complete in coverage of drinking behavior and problems; and considerable interest and approval were expressed that such a study was being undertaken. A very few technical changes were made in the questionnaire on the basis of the pretest; and the final pilot study then went into the field.

The Sampling Process

The choice of the four localities was made on a subjective basis by representatives of the Bureau of Naval Personnel, the intent being to represent varying conditions making for expected differences in drinking behavior. Thus San Diego was selected to represent a non-isolated large stateside base with many types of recreational and off-post housing facilities available; NAS Whidbey Island was chosen to represent relatively isolated stateside bases; Guam was selected to represent isolated overseas installations; and Yokosuka was chosen to represent nonisolated overseas installations.

The field work was completed between mid-September and mid-October, 1972. Prior to the field work, the average strength figures

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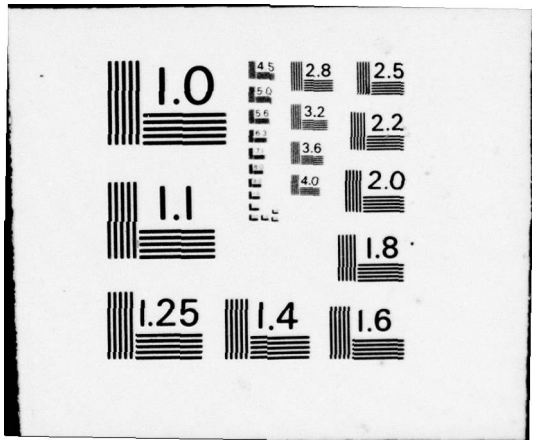
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5.6

for commands at the four locations were obtained from the Navy. The commands to be sampled were determined jointly by Bureau of Naval Personnel and Bureau of Social Science Research personnel, using such criteria as the officer-enlisted ratio (it was desired to get units with a fairly high ratio of officers to enlisted men because the research design required an oversampling of officers so as to provide sufficient numbers of officers for separate analysis), and geographic proximity to the main area of the installation.

An advance team consisting of a Navy officer assigned by the Bureau of Naval Personnel and a representative of the research agency preceded a single field administrator to each locality by a few days. The advance team, in cooperation with local Navy authorities, made a final selection of commands to be sampled and procured up-to-date rosters from which the team drew samples of respondents (assigning random halves to the by-mail and field-administered groups for the methodological experiment). Additionally, the advance team arranged schedules for the field-administration phase of the experiment and prepared all materials for the by-mail phase of the experiment. The survey administrator, following a few days behind the advance team, administered the questionnaires to those chosen for the field-administration groups, took care of necessary rescheduling and follow-up procedures, and delivered the previously prepared mail packets to the appropriate commands for further delivery to individual respondents. Each of the two teams remained in each of the four localities approximately one week.

The choice of <u>units</u> for sampling was based in general on the principle of giving each male officer (exclusive of Admirals) and each

enlisted man a known chance of being selected. Thus all units at each location at the time of the visit of the survey team were eligible for sampling. Units were subsampled to yield from five to nine units at each locality: subsampling was resorted to for administrative convenience in dealing with a small number of units. An approximately equal number of persons was sampled from each unit selected for sampling.

Sampling within the selected commands was conducted, using random procedures, from unit rosters after the rosters had been purged of the names of men and officers who would be absent from the command (transferred, on temporary duty, on leave, and so on) at the time of survey. Additionally, in some commands, it was necessary to remove from the sampling rosters groups of men who were specifically excluded from participation by their commanding officers; for example, sections on watch at the time of the survey and night shifts at Naval aviation installations. In no case was there evidence (as adjudged by the advance team) that such exclusions introduced selective bias into the samples. Nonetheless, it is important to note that the random selection was made from constructive populations of some of the participating commands. The objective was to draw approximately 200 officers and 250 enlisted men at each of the four localities; but officer samples, which were drawn separately, turned out to be somewhat smaller because there were too few officers at some localities to permit the participation of 200 of them during the short visit of the field team.

Administration of Questionnaires

The by-mail administration of questionnaires was accomplished as follows: the name and address of each selected respondent was typed on labels which were affixed to a control record card, to the envelope to go into the mails to the respondent, and to a postcard which the respondent was to return to the research organization to certify that he had returned the questionnaire. This system was designed to encourage selected respondents to return the questionnaire, because they were told on the cover-sheet of the questionnaire (see Appendix C) that if they did not return the postcard certifying they had returned the questionnaire, they would continue to get further requests for compliance. Each command was given a package (via guard mail) containing the sealed mail-questionnaire packets for all officers and men who had been selected for participation in the mail portion of the survey, with a request that the packets be delivered to the addressees at the earliest practicable time. The instruction sheet for each command (see Appendix C) asked for a return report to the research agency on specific reasons for nondelivery of any packet to an individual addressee.

By the end of October (two to four weeks after the questionnaires to the by-mail sample were placed in the mails), approximately 78 per cent of the by-mail addressees had returned a questionnaire. This compared very well in the aggregate with the completion rates within the on-site-administered group (see below), but the completion rate for enlisted men was materially lower for the by-mail group. Accordingly, a mail follow-up was sent out to the approximately 250

enlisted men and officers who had failed to return a certification-of-completion postcard by the end of October. This follow-up included a letter urging cooperation in the survey (see Appendix C) and another copy of the questionnaire, marked "Second Mailing." Addressees were instructed to disregard the second questionnaire if they already had returned the first one. The addressee's command was queried as to any reasons for nondelivery of mails, but was asked not to put pressure on addressees to return the questionnaires because that would affect the realism of the mail v. field-administration experiment.

The field-administered portion of the survey was conducted in the same fashion as described above for the pretest. Enlisted men were assembled into medium-sized groups (usually ten to 40 men) and were briefed on the purpose of the survey and were reassured as to their anonymity. The field administrators answered any questions that came up during the half-hour to one hour that enlisted respondents spent filling in the questionnaires. Upon completion of the questionnaire, when possible the field administrator went over it with the respondent rapidly, to make sure all important items were answered and to get the respondent to correct any glaring errors of omission or contradictory responses. Officers filled in the questionnaires either after briefing in small groups or were given the questionnaires individually by the field administrator in the respondent's office.

The on-site administration of the questionnaires conformed to the detailed "Instructions on Data-Collection Procedures, Navy Survey on Drinking" of August 8 (attached).

The completion rates a minimum of two weeks after the second mailing are shown in the following Table 30:

TABLE 30

SUMMARY OF COMPLETION RATES FOR MAIL AND ON-SITE SAMPLES

	Samples			Usable Questionnaires[a]			Usable Completion Rate		
	Officers (N)	Enlisted Men (N)	Total (N)	Officers (N)	Enlisted Men (N)	Total (N)	Officers %	Enlisted Men %	Total %
MAIL SAMPLE									
Guam	98	132	230	92	100	192	94	76	84
Yokosuka area	77	154	231	75	133	209	98	86	91
Whidbey Island	102	125	227	100	98	198	98	79	87
San Diego	127	180	307	116	129	245	91	72	80
Location unknown	-	-	-	-	2	2	-	-	-
Total	404	591	995	383	462	845	95	78	85
Total based on "Adjusted Sample"[b]	400	579	979	383	462	845	96	80	86
ON-SITE SAMPLE									
Guam	98	132	230	76	103	179	78	78	78
Yokosuka area	77	154	231	59	116	175	77	75	76
Whidbey Island	102	125	227	85	96	181	83	77	80
San Diego	125	177	302	105	118	223	84	67	74
Total	402	588	990	325	433	758	81	74	77
Total based on "Adjusted Sample"[b]	386	553	939	325	433	758	84	78	81
Grand Total	806	1179	1985	708	895	1603	88	76	81
Grand total based on "Adjusted Sample"	786	1132	1918	708	895	1603	90	79	84

[a]An additional 23 by-mail questionnaires and an additional 9 on-site questionnaires were unusable because they were returned blank or were missing much of the vital information.

[b]The "Adjusted Sample" was determined by subtracting from the sample drawn, the number of cases in which the participating command reported that a mail questionnaire was undeliverable, or that a person selected for on-site administration of the questionnaire was absent for reasons that the study staff judged to be legitimate, including being on leave or temporary additional duty, or no longer on duty at the locality.

The following comparisons of interest appear in the above table:

1. The final by-mail return rate after a single follow-up (85%) was higher than that for the on-site-administered sample (77%).

2. The return rate for the by-mail sample of enlisted men was slightly higher (78%) than for the on-site-administered enlisted men (74%). The by-mail response rate for enlisted men is a very respectable figure in comparison to most national probability samples of civilians; but the rate is low enough to permit the operation of selective bias in nonresponse, <u>if</u> it so happened that the heavier-drinking enlisted men avoided returning the mail questionnaire. (However, Chapter IV shows that this type of bias does <u>not</u> appear to have been operating.)

3. The return rate for officers in the by-mail sample (95%) was materially higher than the return rate for officers selected in the on-site-administered sample (81%). Both groups of officers had higher return rates than enlisted men, possibly because of the generally higher educational level of the officers and their being more accustomed to filling out questionnaires and reports. It is assumed that one reason the by-mail method resulted in a higher rate of return for officers than the on-site method (even though the by-mail method put less direct pressure upon the respondents than the on-site method) is that the officers had the opportunity to fill out the by-mail questionnaire at their convenience, whereas the on-site administration was a more hurried affair, with some of the selected officers not being available to fill out the

questionnaire during the brief period of two or three days that the field crew team was at the installation after the drawing of the sample.

4. It will be noted that although there are some differences in completion rates for the four localities, in general the completion rates approached a respectable level at all localities. The visiting field teams reported excellent cooperation at all localities, if due allowance is made for the fact that most units selected for participation were exceptionally busy, and that in several of them other surveys (including drug surveys) had been conducted very recently. The field teams are of the opinion that these satisfactory response rates can be improved modestly in future field-administered surveys if the following refinements are carried out:

a. Future surveys conducted on-site should be explicitly supported from a higher level in the Navy command structure. Given the competing demands on their resources, the high priority given this survey--as reflected in the on-site attendance rates--reflects the excellent cooperation of commanders in the four localities. If on-site attendance rates are to be increased, a decision to give the survey a very high priority will have to be transmitted to commanders of participating commands by an authority very high in the Navy's hierarchy.

b. Local commands were most cooperative in assigning part-time, local liaison officers (usually alcohol and drug control officers) to help with the sampling and logistical arrangements. Nonetheless, because of the press of other duties, these

officers were not always available. It would be most helpful in the future to have the liaison officer assigned by the senior, coordinating command in a locality on a full-time basis for the short period of time required for the survey. It would also be advisable to insure that the liaison officers of individual, participating commands are immediately available during the actual conduct of on-site survey sessions.

c. The special nature of this experiment meant that selected units had a very heavy levy of respondents from their personnel, consisting of as much as one-fourth of their officers or enlisted men in some instances. Future surveys will place less burden upon individual units by sampling them at much lower rates, thereby occasioning materially less disruption of ongoing activities and achieving materially better completion rates.

d. In the future, field teams should spend several extra days at each installation in order to be able to schedule more make-up sessions for stragglers and others unavailable at the time of the initial questionnaire-administration sessions. This will improve completion rates.

The by-mail response rate, while also satisfactory, could be increased in future surveys by the following steps: sending the questionnaires directly to the respondents rather than through their commands, thus saving time in transmittal; sending an additional return postcard certification-of-completion with any second or subsequent mailing, so as to insure tighter control over returns and more inducement to respond; and sending a third mailing which might raise the response rate by an additional one or two per cent.

It should be recognized that the by-mail method in any large-scale survey will be carried out through sampling from computerized central Bureau of Naval Personnel files (with much greater economy, convenience, and precision in stratification and selection) rather than through use of field teams. The use of field teams to prepare sampling lists for the by-mail portion of the survey was adopted in order to maintain appropriate control of random assignment of prospective respondents to the two methods being compared in this experiment; and obviously this more costly and time-consuming method of sampling will not be needed for most surveys to be conducted by mail in the future.

Chapter IV offers conclusions that in the light of the findings of this controlled experiment, the by-mail method is recommended for future large-scale surveys of drinking practices among Naval personnel, from the standpoints of costs and completion rates. It might be added that this study indicates that an 85 per cent completion rate for officers and enlisted men combined is close to the upper limit that might be achieved with the use of either method; increases obtained by the means suggested above most likely would be quite modest.

Editing and Data Processing

Questionnaires were edited by workers in the Berkeley branch office of the Bureau of Social Science Research, for the purpose of resolving contradictions in response where the intended answer was obvious (e.g., if the person responded that he never drank at one point in the questionnaire but answered other items in terms of having drunk rather frequently, his "never" response would be edited to be congruent

with his response to other items). A handful (less than one-half of 1%) of questionnaires were discarded when the editing process revealed widespread evidence of inaccuracies or omissions attributable either to marginal literacy or lack of motivation.

Cards were punched directly from the questionnaires, and these were verified 100 per cent. A further editing process was carried out by computer, and inconsistencies on issues of fact were corrected wherever the intent was clearly obvious. After computer scoring of the drinking-problem scales discussed in Appendix B, the final tables in this report were prepared.

Instructions on Data-Collection Procedures, Navy Survey on Drinking

1. Before visiting an installation, make sure advance arrangements have been made for cooperation of the installation in the survey, and for your own housing and transportation.

2. Immediately upon arrival at the installation, check in with the appointed liaison officer and with the adjutant or company clerk of the local commander. Many installations require that you briefly "pay your respects" to the commanding officer. Have with you proof of your authority for conducting the survey, for presentation if requested of you.

3. Make sure the sampling instructions are followed to the letter, making clear to all local personnel that this study has full Department of Navy authorization and that the selected individuals are to be requested to cooperate in the survey. You are not permitted to make substitutions for the individuals who are randomly selected for participation in the survey. If more than a handful of individuals fail to report for the survey, contact the local liaison officer to rectify the situation; and if the sample is still short, get in touch immediately with your supervisor.

4. Schedule the data-collection sessions at appropriate intervals (e.g., no closer than two hours apart, and, where possible, during normal working hours) at appropriate sites (e.g., classrooms or similar rooms with sufficient privacy and quiet and comfort -- with classroom desks or suitable provision for writing). You may have to distribute questionnaires to some senior officers individually, with provision for your returning (preferably the same day) to pick up their questionnaires and suggestions.

5. Assemble respondents for group sessions at the appointed hour, making provision for them to check off their own names from the sampling roster as they enter the room. See that each man has a suitable writing space, a questionnaire and a sharpened pencil (for those who do not prefer to use their own pens), and that there are sufficient ashtrays for all smokers. Be sure to have a supply of sharpened pencils.

6. Put the men at ease by explaining the following:

   a. They were chosen at random for this survey on drinking practices, which is being conducted throughout the Navy to establish the facts about drinking practices and attitudes. The survey is anonymous: they will not be linked to their responses in any way; and the results of the survey should be helpful in bringing about a better understanding of certain types of problems in service life.

   b. Go over with them the statements on the cover-sheet while they are reading it. Do not read all of it: but make sure you stress the point about anonymity; and do read off the specific four points about answering all questions carefully, rechecking their responses, and returning the questionnaire to you when they are through. Point

out that since this survey is just beginning, we are asking them to fill in the extra one-page inquiry as to their suggestions on how the survey might be improved. (Point out that this is to be filled in after they have filled in the questionnaire and before they turn it in to you.) Let them know they are free to leave when they have completed these tasks. Tell them corrections can be made by either erasing or crossing out the incorrect response.

c. Let the men know they are not to talk to each other during the session (and arrange alternate seating to discourage whispering to seatmates). Also let them know that if they find questions hard to understand or to answer, that they are to raise their hand and you will go to them to explain the question. (Watch for signs of blockage in response, offering occasionally to answer any questions that may arise.) If a question needs explaining to all, explain it aloud, making a note of any items which need such amplification.

7. As each man finishes and brings you the questionnaire and suggestion sheet (officers will have these in an envelope), please glance quickly through the completed forms to see whether all relevant items have been answered. Draw to his attention any unanswered items, asking him to mark the answers in a contrasting color (colored pencil if he has used plain graphite pencil) so we in the home office will know which items required assistance to respondents.

8. Ask each man if he has any (other) suggestions or questions about the survey, note them on his suggestion form, and be sure to thank him for his help before he leaves. Conspicuously seal all officer's envelopes on the spot, and bundle enlisted men's questionnaires together to emphasize their anonymity.

9. Before leaving the installation, make sure you have bundled together the completed questionnaires and suggestion sheets separately for each session you have administered, counted them, and affixed a number (001, 002, etc.) at the upper right-hand corner of each questionnaire. Fill out the Session Report Sheet (making sure the number of completed questionnaires agrees with the numbers of the questionnaires for that session: e.g., if there were 24 men in the session, the last questionnaire should be numbered "024"). Rubber-band or tie the questionnaires and suggestion sheets for each session together, with the Session Report Sheet on top.

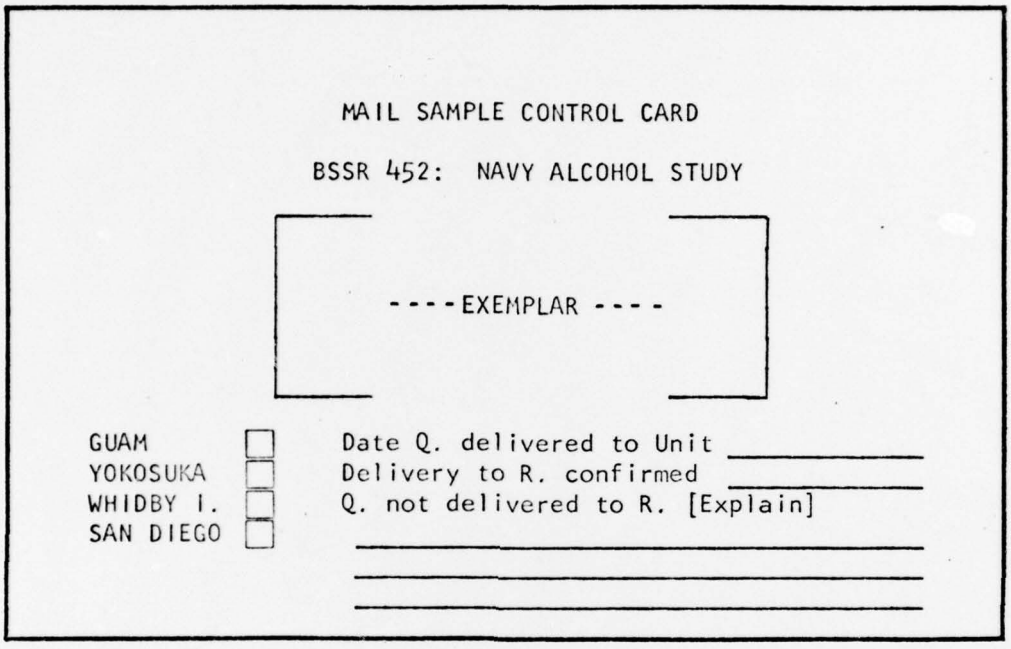
10. Be sure to check out with the installation commander's office, thanking the liaison officer and the adjutant (or company clerk) for the cooperation.

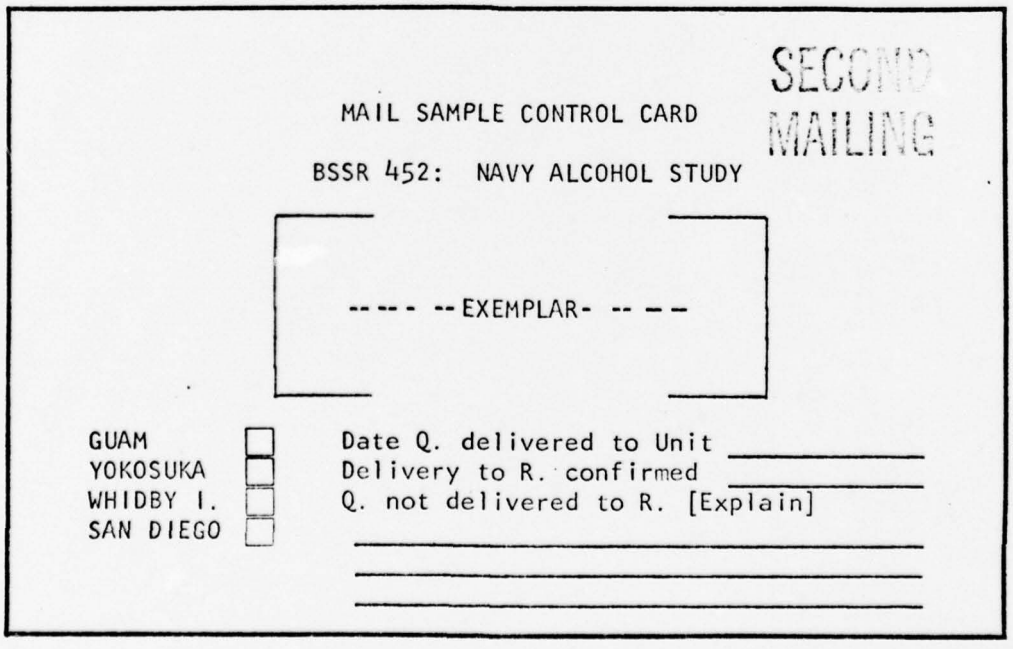
11. In your communications with the personnel of the installation, never let anyone know the responses of individuals. Never show a completed questionnaire to anyone. Do not give the impression to anyone that you may have done so (for example, do not take completed questionnaires with you when you are talking to headquarters personnel for the installation). Do not leave any blank questionnaires with anyone.

12. Please ship completed questionnaires by secure mail (air parcel post, heavily insured, is preferable) just as soon as you can, so that we can proceed to process the findings. We are operating on very tight deadlines; and every day counts.

FIGURE A-1

SAMPLE CONTROL CARDS





BUREAU OF SOCIAL SCIENCE RESEARCH, INC.
1200 SEVENTEENTH STREET, N.W., WASHINGTON, D. C. 20036
TELEPHONE (202) 223-4300

EXEMPLAR--SENT TO GUAM UNITS FROM YOKOSUKA, JAPAN

On , a Field Team from the Bureau of Social Science Research delivered to your command, a number of addressed envelopes to be delivered to each of several officers and enlisted men of your command. Each envelope contained the materials necessary for a mail response to the Navy's Pilot Study of Attitudes on Alcohol and Alcoholism.

It is necessary that the study team know if any of these envelopes were undeliverable. This information is essential to determination of response rates and analysis of nonresponses. We would, therefore, appreciate it if you would have the form which appears at the bottom of this page completed and returned to the address indicated. After completion of the form which appears below, PLEASE DESTROY THE UNDELIVERED QUESTIONNAIRE PACKETS.

Very sincerely,

Bruce B. Dunning
Research Analyst

Mr. Bruce B. Dunning
Study 452
Bureau of Social Science Research, Inc.
1200 17th Street, N.W.
Washington, D.C. 20036

Unit/Command _____

Undeliverable addressees	Reason (fill in short statement of reason; e.g., "transferred," "TAD," "UA," "Unidentifiable," etc.

(Continue on back if necessary)

BUREAU OF SOCIAL SCIENCE RESEARCH, INC.
1200 SEVENTEENTH STREET, N.W., WASHINGTON, D. C. 20036
TELEPHONE (202) 223-4300

EXEMPLAR--USED AT YOKOSUKA/ATSUGI, JAPAN, WHIDBEY ISLAND AND SAN DIEGO

The attached package contains mail-questionnaire packets for all of those officers and men from your command that were selected for participation in the mail portion of the Navy's Pilot Study on Alcohol and Alcoholism. We request that you deliver these to the addressees at the earliest practicable time. Following delivery, no further action by the command is necessary or desired -- the rest is up to the selected respondent.

It may happen that one or more packets will be undeliverable. This can occur when a respondent has been transferred from the command subsequent to sample selection, because of sickness, etc. Please attempt to make delivery until . If by the date indicated, you still have undelivered packets, please complete the form at the bottom of this page and return it to the address indicated. After completion of the non-delivery form, DESTROY ALL UNDELIVERED PACKETS.

May I express our sincere appreciation for the excellent cooperation which we have received from your command in the conduct of this study.

Very sincerely

Bruce B. Dunning
Research Analyst

Mr. Bruce B. Dunning
Study 452
Bureau of Social Science Research, Inc.
1200 17th Street, N.W.
Washington, D.C. 20036

Unit/Command _____

Undeliverable addressees	Reason (fill in short statement of reason, e.g., "transferred," "TAD," "UA," "Unidentifiable," etc.)

(Continue on back if necessary)

BUREAU OF SOCIAL SCIENCE RESEARCH, INC.
1200 SEVENTEENTH STREET, N.W., WASHINGTON, D. C. 20036
TELEPHONE (202) 223-4300

EXEMPLAR--USED FOR GUAM (MAILED FROM JAPAN), YOKOSUKA/ ATSUGI, JAPAN, WHIDBEY ISLAND AND SAN DIEGO

On a Field Team from BSSR administered questionnaires to a number of officers and enlisted men from your command, in connection with the Navy's Pilot Study of Attitudes on Alcohol and Alcoholism. The response rate was generally gratifying -- largely as a result of your cooperation and that of representatives of your command. As expected, however, there were some nonresponses.

An analysis of nonresponses will contribute to the value and usefulness of the study results. Therefore, we are seeking your cooperation in determining the reasons for nonresponse in those cases which did occur. Please, at your convenience, have the form at the bottom of this page completed and returned to the address indicated.

Again, may I express my sincere appreciation to you, to those members of your command who assisted in making preliminary arrangements, and, of course, to those officers and men who participated in the survey, for your interest and cooperation.

Very sincerely,

Bruce B. Dunning
Research Analyst

Mr. Bruce B. Dunning
Study 452
Bureau of Social Science Research, Inc.
1200 17th Street, N.W.
Washington, D.C. 20036

Unit/Command _____

On-site Nonrespondents	Reason (fill in short statement of reason; e.g. "watch," "refusal," "forgot," etc.)

(Continue on back)

APPENDIX B

PROCEDURES FOR SCORING DRINKING PROBLEMS

As described in Chapter III, there were three basic types of drinking-problem scores to be derived from questionnaire responses, one consisting of thirteen specific types of drinking problems or potential problems, another consisting of a summarized typology drawn from a combination of the specific types of problems, and a third being drawn from a special group of items concerned with special items related to the possible impairment of on-duty performance by drinking or the aftermath of drinking.

As also noted in Chapter III, this Navy pilot study was planned to test the applicability within the Navy of the measures of drinking problems developed for the civilian population in several national and regional surveys conducted by The George Washington University and the University of California which culminated in the national survey of men aged 21-59 published in the new 1972 monograph by Cahalan and Room entitled Problem Drinking Among American Men. The results of this pilot survey clearly demonstrate that valid comparisons can be conducted between these recent studies of drinking problems among civilians and large-scale surveys among Naval personnel which may be conducted in the near future.

The scales for thirteen specific types of drinking problems, and the typology scale, permit direct comparisons between the civilian studies and future Navy surveys conducted upon representative samples. Only a few items differed in wording from the civilian versions: the differences, which were not material, were necessary in adapting the self-administered Navy questionnaire from the personal-interview civilian questionnaire.

Below are presented the details of the scales for the thirteen problem areas, the problem typology derived from the thirteen specific areas, and a special "Navy Job Problems" scale used in conjunction with the tables concerning duty time lost because of drinking. The thirteen specific types of problems and the typology are almost identical in form to their counterparts as they appear in Appendix B of the Cahalan-Room monograph, except that about a half dozen items have been dropped from the civilian scales in order to make possible future Navy-civilian comparisons on the same sets of items.

The rationale used in building these drinking-problem scales was to give a higher score value to an item if its consequences appear obviously more severe than for other items: thus a higher score is accorded in the "Heavy Intake" scale if the individual reported drinking twelve or more drinks per occasion at least once weekly or drank eight or more drinks daily, than if he drank lesser amounts per occasion. Another principle in scale-building was to give a higher score when the respondent checked a large number of items as applicable than when he checked a few items.

The items making up the problem drinking scales that follow are presented in summarized form. For the full wording of the applicable items, please turn to the questionnaires in Appendix C.

PROBLEM DRINKING SCORES

HEAVY INTAKE[a] (High score = 3 or more)

Punch 4	12 or more drinks per occasion at least weekly or 8 or more daily[b]
3	12 or more drinks per occasion monthly or 8 or more weekly or 5 or more daily on 4 or more days per week[c]
2	8 or more drinks per occasion monthly or 5 or more at least once a week or gets high/tight at least once a week
1	12 or more drinks per occasion yearly or gets high/tight at least once a month
0	No problem (All others)

BINGE DRINKING[a] (High score = 2 or more)

Punch 3	Stayed intoxicated for several days and went on binge 5 or more times.
2	Stayed intoxicated for several days or went on binge 3 or more times.
1	Went on binge once or twice
0	No problem (All others)

---

[a]All categories are mutually exclusive.

[b]Navy item reads "between 8 and 11," civilian comparison reads "8 or more."

[c]Navy item reads "between 4 and 7," civilian comparison reads "5 or more."

PSYCHOLOGICAL DEPENDENCE[a] (High score = 4 or more)

Score Items	Score
How helpful have you found having a drink to be when you are depressed or nervous:	
Very helpful	3
Fairly helpful	1
I drink when I want to forget everything:	
Very important	3
Fairly important	1
A drink helps me to forget my worries:	
Very important	3
Fairly important	1
A drink helps to cheer me up when I'm in a bad mood:	
Very important	3
Fairly important	1
I drink because I need it when tense or nervous:	
Very important	3
Fairly important	1
I often drank in order to change the way I felt	3
All others	0

[a]Additive score. Assumed to be current (within last three years).

SYMPTOMATIC DRINKING[a] (High score = 3 or more)

Score Items	Score
Awakened the next day not being able to remember the things I had done while drinking	1
Skipped a number of regular meals while I was drinking	1
Tossed down several drinks pretty fast to get a quicker effect	1
Had a quick drink or so when no one was looking	1
Took a few quick drinks before going to a party to make sure I had enough	1
Often took a drink the first thing when I got up in the morning	1
My hands shook a lot the morning after drinking	1
Sometimes got high or tight when drinking by myself	1
All others	0

BELLIGERENCE[b] (High score = 2 or more)

Score Items	Score
Experiences in connection with drinking:	
Felt aggressive or cross	1
Got into a fight	1
Got into a heated argument	1
All others	0

[a]Additive score.

[b]Additive score.

LOSS OF CONTROL[a] (High score = 3 or more)

Score Items

Once started drinking, difficult to stop before becoming intoxicated.

Kept on drinking after promising self not to.

How much do you worry about your drinking: A lot.

Score construction	Score
All 3 problems above	4
Any 2 problems above	3
Any 1 problem	2
How much worry about drinking: Some.	1
No problem (all others)	0

[a]Assumed to be current (within last 3 years).

PROBLEMS WITH WIFE[a] (High score = 3 or more)

Score Items	Score
Wife actually left home because of Respondent's drinking	5
Wife got angry or threatened to leave home because of drinking	4
Wife got angry but did not threaten to leave home, or drinking was harmful to marriage/home life	3
Wife showed concern over drinking, or indicated Respondent should cut down	2
All others married at any time during past three years who are drinkers but have no problem	1
All others not above	0

PROBLEMS WITH RELATIVES[b] (High score = 2)

Score Items	Score
Respondent's drinking was very displeasing to a relative (other than wife)	2
Relative indicated Respondent should cut down drinking	1
All others	0

[a]All categories are mutually exclusive.

[b]All categories are mutually exclusive.

PROBLEMS WITH FRIENDS AND NEIGHBORS[a] (High score = 2 or more)

Score Items	Score
Drinking involved losing a friendship or drifting apart from a friend	3
Drinking harmed friendships and social life, or both friends and neighbors said to cut down drinking	2
Friends said to cut down drinking, or neighbors said to cut down	1
All others	0

JOB PROBLEMS[b] (High score = 2 or more)

Score Items	Score
ANY TWO OF THE FOLLOWING:	3
Drinking hurt chances for promotion/raise	
People at work said cut down drinking	
Drinking had harmful effect on job and assignment	
ANY ONE OF THE ABOVE	2
Have gotten high/tight on job, or stayed away from work because of hangover	1
All others	0

---

[a]All categories are mutually exclusive.

[b]All categories are mutually exclusive.

POLICE PROBLEMS[a] (High score = 2 or more)

Score Items	Score
Trouble with police about driving after drinking, and other nondriving trouble with police about drinking	3
Trouble with police about driving after drinking, or other nondriving trouble	2
Police questioned or warned Respondent because of his drinking	1
All others	0

FINANCIAL PROBLEMS[b] (High score = 2 or more)

Score Items	Score
Spent money on drinking that was needed for essentials	3
Drinking was harmful to financial position	2
Spent too much money on drinks or after drinking	1
All others	0

[a] All categories are mutually exclusive.

[b] All categories are mutually exclusive.

HEALTH OR INJURY PROBLEMS[a] (High score = 2 or more)

Score Items	Score
Had illness connected with drinking which kept Respondent from working or regular activities for a week or more, or in a hospital/rest home due to drinking	3
Physician suggested Respondent cut down on drinking AND: Drinking had harmful effect on health AND/OR Injury to Respondent due to his drinking	2
Physician said to cut down drinking, or drinking had harmful effect on health	1
All others	0

CURRENT PROBLEMS TYPOLOGY

To construct the typology used in Table 1 and similar tables throughout this report, the problem drinking scores indicated on the preceding pages were combined in the following manner:

Problem Drinking Scores Used	Scoring Scheme
Social Consequences:	
Problems with wife	B
Problems with relatives	A
Problems with friends and neighbors	A
Job problems	C
Problems with police	A
Financial problems	A
Problems with health or injuries associated with drinking	A

Scoring Scheme:

A	B	C
Punch 1 scored 1	Punch 2 scored 1	Punch 1 scored 1
2 scored 2	3 scored 2	2 scored 2
3 scored 4	4 scored 3	3 scored 3
	5 scored 4	

[a] All categories are mutually exclusive.

The total scored by an individual after application of this procedure was termed his "extrinsic score"; an extrinsic score of 3 or more was interpreted as a high consequences score.

The CURRENT PROBLEMS TYPOLOGY[a] was then constructed as follows:[b]

Punch 4	Extrinsic score of 3 or higher
3	All others with Intake score of 2-4 or Binge score of 2-3
2	All others with <u>any</u> current problems worth considering: Extrinsic score of 1-2 Binge score of 1 Psychological Dependence score of 3 or more Loss of control score of 2-4 Symptomatic Behavior score of 2-8 Belligerance score of 2-3
1	All other current drinkers[c]
0	Not drinkers within the last year (includes No Answers)
	(All others)

---

[a]All categories are mutually exclusive.

[b]Categories are mutually exclusive.

[c]The rationale of the division between 1 and 2 is not so much that those in 2 have a problem of any sort as that those in 1 definitely do not, as far as we are able to measure.

APPENDIX C

QUESTIONNAIRES AND FIELD FORMS USED IN PILOT STUDY

There were four separate questionnaires: for officers and enlisted men, each divided into by-mail and field-administered versions. The questionnaires were color-coded for administrative convenience, with the print on the cover being red for the by-mail form and green for the field-administered form, and the officer questionnaire being designated by an appropriately colored stripe across the top of the cover. The officer and enlisted versions were identical for the first eighteen pages, differing in the remaining pages only on certain background items; the instructions on the inside cover differed only in that the officers were instructed to turn in their completed questionnaire in a sealed envelope. The by-mail version differed from the field-administered questionnaire only in the instructions on the inside cover (where the by-mail respondents were requested to return their questionnaires through the mails in the provided franked return envelope, while the field-administered questionnaire was to be handed to the field administrator upon completion). By-mail respondents were also requested to sign their name to an enclosed postcard and return it to certify that they had returned the questionnaire.

All covering instruction sheets, unduplicated questionnaire pages, and the return postcard used with the by-mail version are appended. The content of the questionnaires may be summarized as follows:

Q. 1: A "warm-up" item on health.

Q. 2: Questions in which the "psychological dependence" item 2c on "Having a drink . . ." is embedded.

Q. 3-6: Heaviness-of-drinking items.

Q. 7: Question in which the "psychological dependence" items (e,g,i,j) are embedded.

Q. 8-11: Intoxication and binge drinking.

Q. 12: Problem drinking items (except for "warm-up" items 1 through 6).

Q. 13: Loss of duty time or efficiency on the job because of drinking.

Q. 14: Drinking more at present duty station, and reasons for drinking more.

Q. 15-17: More problem drinking items (17b and 17c are items not used in the prior civilian studies).

Q. 18-19: Marital status and problems with wife over one's drinking.

Q. 20: Drinking for each day during preceding week.

Q. 21: Opinions about drinking in the Navy.

Q. 22: Attitudes toward intoxication and alcoholism.

Q. 23-24: Opinions on where service personnel should go to get help for drinking problems.

Q. 25: Recall of Navy-sponsored information about effects of drinking too much.

Q. 26: Definitions of alcoholism.

Q. 27 through page 21: Background items.

Page 22: Free-answer question on whether respondent thinks the Navy has many men with alcohol problems; and if so, what does he think should be done about it. (A supplementary report on these suggestions is forthcoming.)

Cover Page

Mail and On-Site Questionnaires

Officers and Enlisted Men

SUPPLEMENTARY REPORT #1

Open Ended Comments about Drinking and Drinking Problems

The self-administered questionnaires dealing with drinking and problem drinking which were completed by 708 officers and 895 enlisted men required only check mark answers and thus offered no opportunity for comments or write ins by respondents. To enable survey participants to express any opinions they wanted to communicate in connection with the survey, one open-ended question was included at the end, worded as follows:

> Please use this space to write down any ideas you may have about whether you think the Navy has many men with problems related to alcohol; and if so, what you think should be done about it.

A total of 633 respondents, 322 officers and 311 enlisted men, completed this question. This is a fairly high rate for a write in answer, which suggests that the questionnaire content was of high interest to the respondents.

The comments made by respondents can be classified into three general categories:

1. Comments confirming or denying the existence of drinking problems in the Navy, and discussing alcohol in relation to drugs. A total of 500 such comments were recorded.

2. Comments about the possible causes of excessive drinking or alcohol-related problems. A total of 374 comments on this topic were made.

3. Recommendations for dealing with the existing problem, or for solutions and future prevention. A total of 553 such comments were received.

Table 1 classifies and summarizes the comments which were tabulated.

It is noteworthy that with respect to all categories of comments, practically no issues were brought up which had not been included in the structured questionnaire items. There was also close correspondence between frequency of write ins on any given topic and the "popularity" of this topic in the structured questionnaire. This finding suggests that the questionnaire adequately covered the most salient issues pertaining to drinking and drinking related problems among Naval personnel.

Drinking Problems in the Navy

Of the 1,427 comments (made by the 633 respondents whose comments were recorded) 500 dealt with the existence of drinking problems in the Navy. The overwhelming majority of comments suggested that the Navy has indeed a problem related to alcohol. Fifty-eight respondents thought that the problem was there, but rationalized by saying that it was no worse than in a comparable civilian population, and twenty-six men reported that problems of this nature were minimal if indeed they existed at all.

Some defined the problem in termsof particular individuals and cases which they have come in contact with; others wrote about alcohol as a collective Navy problem.

> The Navy does have a drinking problem. When men have these problems they should be singled out for study with A.A. or similar constructive organizations and given motivation and opportunity to solve their problems.

---

[1] There were a small number of extraneous comments which were not directly responsive to the question asked. These have not been tabulated.

> I believe the Navy has a great number of men with alcohol problems and I think the fault lies with a philosophy I have found predominate in the Navy. No activity, be it a squadron picnic, dance, dinner, ballgrame, etc. can be scheduled without some provision made to have liquor present.

> I know a couple of people personally that have a drinking problem and I think it stems from being stationed overseas with nothing to do. Also having other problems tends to make the person become a chronic drinker.

In this connection, the subject of drugs, and especially marijuana, came up frequently; 58 comments touched upon it. Alcohol was compared with drugs; sometimes as being better than drugs, sometimes worse than drugs, and sometimes was identified as a drug:

> An effort should be made to deal realistically with alcohol as a drug. The common Navy attitude for personnel over twenty-five is that drugs are bad, but booze is O.K.

Marijuana was said to be certainly no worse than alcohol. One lonely man who is homesick for family and friends wrote:

> There are only two ways of putting up with the loneliness and depression. One is smoking grass, which is illegal, and the second is alcohol. So which is the greater of the two evils?

Possible Causes of the Alcohol-Related Problems In the Navy

As these examples suggest, and although respondents were not specifically asked to give their views of possible causes of alcohol problems in the Navy, a large number of comments (374) dealt with this subject. Most often, causes were seen as directly related to Navy policies, regulations, or assignments. In only a minority of cases was there a mention of reasons unrelated to the Navy. Obviously, the context in which the questionnaire was administered made such responses very likely; conceivably, under different circumstances, the same men might have put greater emphasis on physiological, psychological of family-related causes.

Nearly one-half (170) of the causes mentioned dealt with the numerous ways in which the immediate on-base Navy social structure has created an environment which encourages drinking. Most frequently mentioned as a cause was the fact that alcoholic beverages are found at nearly every social event, many of which have near mandatory attendance.

> One thing I have noticed in the Navy is that all Navy parties involve heavy drinking. Attendance is almost mandatory at squadron happy hours; most social activities revolve around the officer's club. With a few frustrations or family problems it is not hard to become an alcoholic in the USN.

> Hypocrisy--encouraging and in some cases demanding officers' presence at happy hours and beer musters, treating social drinking as if it were an end in itself. Then they have the audacity to turn in a special fitness report on someone who is picked up for DWI (driving while intoxicated) while driving home from one of these functions.

The next most important cause was seen in the lack of other forms of recreation:

> In Yokosuka the problem is increased by a noticeable lack of other forms of entertainment. With only weekends occasionally free, there is little time to engage in travel or other cultural activities. The base itself offers little in the way of entertainment and the town is nothing more than bar after bar.

> The lack of good recreational programs encourages a single person to go down to the club and drink all night.

Other ways in which alcohol consumption is encouraged are its low cost and ready availability:

> The Navy has many alcoholics, but the Navy also makes drinking readily available. Even so far as putting it in the barracks for everyone regardless of age. In Vietnam drinking was as big a problem as dope, but alcohol was easier to obtain than laundry soap. Every service club has scheduled happy hours--reduced prices on all drinks.

> Especially in overseas areas its so cheap that one often hears, 'I can't afford not to drink.' My own liquor cabinet is much fuller now than it would be if I had to pay stateside prices.

One officer describes a squadron birthday party.

> I had to buy my cokes, but all alcohol was free. I have a problem convincing guys I'm not a nut just because I don't like to drink.

Certain types of assignments are especially likely to be conducive to excess drinking. Overseas isolation and long periods at sea were most frequently seen as factors:

> I think that most of the trouble caused here by drinking alcohol stems from the fact that Guam is an extremely remote place, the atmosphere is unfriendly, and so are most of the people. For the enlisted men especially there are very few constructive things that they can do with their free time.

> Yes, the Navy has a problem with drinking. I've been in for three consecutive years now and I've spent at least one and a half at sea. I think they should cut down on sea time and stay in port.

> Overseas deployments without families being there are conducive to heavy drinking. The average man can't leave the ship long enough to really get engrossed in travel or recreation because he wants to save his leave for his family when he gets home.

> I can't say how to stop a man from drinking, but I can tell you why I started. Before I was assigned this ship I rarely drank and then with friends for fun. But after being assigned here, I started drinking heavily due to missing my wife, homesick, lonesome, and nothing better to do. Also living conditions aboard this ship were real bad and still are.

Personal reasons--especially family separations, were quoted, most often by enlisted men:

> I am married and separated from my wife due to Navy reasons and have been drinking quite heavily since we have been separated. I hadn't realized how heavily until I filled out this form.

> I feel that most people become depressed about work, home, or family and they turn to alcohol as a form of escape for lack of anything else to do.

Enlisted men as well as officers also blamed peer group pressures, although the two groups had a different perspective. Officers stress the pressure to participate in social functions, where nondrinkers sometimes are given a hard time:

> Officially the Navy discourages drunkenness off duty, but a large number of CO's, department heads, Division officers, and leading PO's encourage it and in actual fact, nondrinkers are subject to (anything from) mild or good-humored joshing to actual ridicule by their seniors and contemporaries.

> I have seen good officers fail to get promotions because they refused to participate in such events. Because I have not participated in such social events, some of my evaluations have been lowered.

The social pressure to drink may be stronger among officers than among enlisted men but the latter group often feel pushed to prove their manhood and uphold the Navy tradition and sailor image.

> Some men come into the Navy having never tasted beer or alcoholic beverages. They drink because they want people to think they are men, but they are really fooling themselves. I was like this. I never drank until I came into the Navy, and now I wish I didn't.

> I feel that the Navy command, either through unintentional design or through design has allowed the misuse of alcohol for so long that the young enlisted people are led along the path by senior enlisted and doting officers. The imagery of the swaggering carefree hapless drunken sailor is an accepted description of the 'blue jacket.'

There appears to be a discrepancy between the official Navy policy regarding excessive drinking and actual Navy practice.

> Until the Navy's official attitude is reflected by almost all in authority, I believe the Navy will continue to have serious drinking problems.

Finally, a few men felt that the Navy was responsible by being too permissive or too repressive:

> The tragic fact that the Navy is split between those in favor of CNO's programs and those opposed underlies the problem. We must get together and pull one way.

Although it is believed that alcohol consumption in the Navy often results from the desire for female companionship, with alcohol activing as either the avenue or the surrogate, only 22 respondents brought up this connection:

> When they come into port, most sailors go straight to those bars and spend money on booze for themselves and their 'girl' for the night. Most sailors will not get a girl, so they just sit there and drink.
>
> In many foreign ports the bar girls are the only ones who speak English or dare be seen in the company of a serviceman.

Recommendations for Solution

The largest number of comments contained suggestions about what should be done about the problem. These focused on two dimensions: treatment and prevention.

The recommendation to rehabilitate problem drinkers was the item on which there was the highest consensus among respondents. (These findings are in line with the questionnaire results, where majorities also favored rehabilitation.) Nearly all those who mentioned rehabilitation (224 of 229) thought that the Navy should attempt it. Thirty-four of the 224 favoring rehabilitation efforts felt that the Navy should discharge the problem drinker if rehabilitation proved unsuccessful. Only five thought that in the best interests of the Navy, problem drinkers should be discharged.

However, many obstacles to rehabilitation efforts are seen, and a number of comments dealt with these. Admitting drinking problems and seeking treatment is seen as a serious career threat, for officers in particular. Thus, one officer who mentioned drinking behavior's effect on promotions and upward mobility ended his statement with the following words:

> I have been completely frank in this questionnaire only because I consider my career almost at its end. Were I a Lt. with ten years instead of twenty-two, my answers would have been much more guarded in order to protect my future assignment and promotion possibilities.

Superiors are said to delay needed treatment by "covering up" for problem drinkers:

> Too many supervisors look the other way when faced with someone incapable of working efficiently, or will cover up for him when he is absent due to overindulgence. Such 'acceptance' contributes to the problem.
>
> Educate supervising personnel to quit 'covering' for hard drinkers and make out realistic evaluations on them; take prompt action to get them through a treatment center and/or out of the Navy.

This latter comment suggests that this respondent favors compulsory treatment referral, but this opinion was not unanimous. More often comments emphasized the need for "a spirit of compassion rather than condemnation." The problem of persuading problem drinkers to seek help was raised quite often in these comments, suggesting that perhaps quite a few of the respondents have had to face this problem for themselves or with respect to some friend or co-worker. The consensus was that ideally, aided by lectures, publications, and movies, the problem drinker should realize his problem and seek help at his own initiative. As previously shown, this sort of action is often impeded by career threats and labels of "alcoholic" which may have real consequences. Insofar as the types of treatment which should be available were brought up, most of the emphasis was on the need for voluntary and individualized treatment programs; the latter are believed to be seldom available:

> Unfortunately, no one can do for an alcoholic what he has to do for himself. He has to realize that he has a problem and <u>want</u> to be cured. Admonishment from doctors, ministers, CO's, and relatives is not the answer.
>
> What is needed, in spite of the present emphasis on blaming the drug is careful psychological evaluation followed by individualized training of alcoholics to respond to anxiety and frustration by active, problem solving, goal-directed behavior rather than passively burying their anxiety under an alcoholic fog.

While it is time consuming, I feel that people with drinking or drug problems really require personalized or individual attention, and that type of care is not available in the military on a regular basis.

Too often alcoholics are ordered to treatment programs. Treatment should be voluntary and freely available to those in need. However, if treatment is refused the Navy should process him out of the service.

In addition to the humanitarian bases for rehabilitation, some respondents also stressed the Navy's social responsibility:

The Navy is somewhat defeating its purpose if it forces sick people out into a society that it is supposed to protect.

Preventive measures were aimed at the elimination, reduction or control of those factors which are seen as needless contributors to excessive drinking. Most frequently the principal alternative to drinking suggested by both officers and enlisted men was the establishment of good recreational facilities. Improved recreational programs might include better athletic facilities, hobbies, cultural and musical entertainment, movies, and even opportunities for taking courses in off hours for personal enlightenment or college credit. A total of 53 respondents offered suggestions along these lines.

It would be better to charge excessive prices at happy hour and direct those profits into recreational programs which are so poorly developed. If we could only redirect our energies rather than drowning them in the oblivion of the ubiquitous depressant. On Guam--an isolated billet--why are our recreational facilities folding for lack of funds?

An aid in solving the problem would be promotion and expansion of entertainment facilities such as tours of other cities and the beaches, and also cultural events would at least offer an alternative to spending the weekends 'at the club.'

An effort should be made to combat this problem through sports programs and expanded special services such as hobby shops. Keeping the men busy at other interests helps keep them out of bars.

Social gatherings and parties could be held with alcohol present, but without the conscious pushing of these beverages, and without heavy consumption as the only normative form of behavior.

> Don't organize events and celebrations around the liquor bottle. A cocktail party is great and people who desire to drink on occasion should not be penalized, but why make alcoholic beverages the only thing available at most functions. Why not schedule parties around luncheons, dinners, or the punch bowl rather than having alcohol as the mainstay of the activity.

In addition to tempering the encouragement of heavy consumption, respondents suggest that still greater efforts should be made to publicize the effects of overindulgence, and to educate and sensitize Navy personnel to an awareness of their own possible problems.

> The use of pamphlets would be good with personal evaluation in conjunction with a movie or short, to the point lectures. Men with problems should be given the opportunity to talk with somebody qualified. Men often don't realize where or how to get help without embarrassment.

> I do see hope in the recent efforts to bring drinking problems to the foreground (such as CNO Sitrep #6 and other public affairs guidance) and to help those with a problem (alcohol rehabilitation centers). Unfortunately there is no quick and easy answer, but covering up a problem will never help.

There were a number of scattered suggestions for other possible approaches, with the largest numbers of comments centering around fear of punishment and career damage, the "covering up" problem and a recommendation for allowing beverages on board ship (the two latter types of suggestions came mostly from officers):

> I feel the Navy has a huge drinking problem, but the people who have the biggest share of the problem are usually career minded. This causes them to be afraid to come forward for help since their problem may cause an entry in their service records and could effect their promotion, assignment and career chances. Therefore these men must be assured of no recriminations before they will be motivated to come forward for help.

> I think we should have booze aboard ship like other countries do. That way it would always be there so that you would be used to it. Maybe this would take away the temptation of wanting to go over the first day that you pull in and blow your mind out getting drunk.

Looking at these comments as a whole, one is primarily impressed with the apparent incompatibility between Navy goals of more temperate consumption and the physical and social realities which one finds permeating the Navy environment. It is hard to see how educational programs can succeed in an environment which is seen by many respondents as a major obstacle to the accomplishment of these goals. Some respondents suggested that the Navy would be well advised to end what is seen as its unofficial practice of encouragement by initiating price increases, making the beverage a bit harder to acquire, and perhaps most importantly by scheduling alternative activities which many would find more rewarding and of greater intrinsic value. Together with more extensive and intensive rehabilitation programs, these steps are suggested as desirable ways of dealing with the very real problem the Navy faces in the area of alcohol abuse.

Open-Ended Comments About Drinking & Drinking Problems

All Comments	Officers	Enlisted Men	Total
	823	604	1,427[a]
EXISTENCE OF DRINKING PROBLEMS	272	228	500
A. General	241	195	436
There is a problem and/or many Navy personnel have problems	198	154	352
Problems are no worse than in a comparable civilian population	33	25	58
There is little if any drinking problem in U.S. Navy	10	16	26
B. Drugs & Alcohol	31	33	64
Alcohol is really a type of drug	23	26	49
Drugs are no worse than alcohol	8	7	15
SPECIFIC CAUSES IDENTIFIED	214	160	374
A. Ways in which the Navy Encourages Drinking	117	53	170
Alcohol is found at every social event	56	18	74
Alcohol is only form of recreation	31	22	53
Low cost of alcohol	16	6	22
Alcoholic beverages are readily available	14	7	21
B. Types of Navy Assignment Encourage Drinking	42	32	74
Overseas isolation	20	10	30
Men hit port bars after months at sea	17	12	29
Bad living conditions	2	6	8
It relieves the stress of battle	3	4	7
C. Personal Reasons	15	29	44
Family separation	15	17	32
Escape	-	6	6
Navy men are immature and ignorant	-	6	6
D. Peer Group Reasons	16	20	36
Drinking proves your manhood	16	7	23
Drinking is the "Navy way"	-	13	13

[a]These 1,427 extracted comments were made by 633 respondents. Most respondents mentioned more than one of the topics listed here.

	Off.	E.M.	Total
E. Navy Discipline; other Navy conditions	14	14	28
The Navy ignores or covers up the problem	9	-	9
The Navy is too repressive	2	7	9
Navy lacks resources to get the job done	3	2	5
There is too much free time	-	5	5
F. Women	10	12	22
Drinking is the first step in getting a woman	6	6	12
Drinking is a surrogate for women	4	6	10
SPECIFIC SOLUTIONS	337	216	553
A. What to do with problem drinkers	129	100	229
Rehabilitate problem drinkers	84	69	153
Get people to admit their problem	19	18	37
If rehabilitation fails, discharge problem drinkers	24	10	34
Discharge problem drinkers	2	3	5
B. How to Discourage Heavy Consumption	72	48	120
Increase recreational facilities	22	31	53
The Navy should stop encouraging drinking	31	11	42
Reduce availability of alcohol	10	3	13
Raise the price of drinks	9	3	12
C. Educate and Publicize the Problem	76	35	111
The Navy should have more education and public relations regarding drinking problems	59	31	90
Teach men to have greater sensitivity to the problem	17	4	21
D. Other Possible Navy Actions	60	33	93
Remove threat or fear of punishment & career damage	12	9	21
Stop Ignoring and/or covering up the problem	14	4	18
Reduce family separations	8	7	15
Allow alcoholic beverages on ships	13	2	15
Make work more meaningful	6	3	9
Improve shipboard life	5	4	9
Have greater opportunity for meeting women	2	4	6

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MEMORANDUM

TO: Captain James A. Baxter, USN, Director, Alcohol Information Center

FROM: Ira H. Cisin and Don Cahalan, Bureau of Social Science Research, Inc.

SUBJECT: Supplementary Analysis of Drinking Problems, Navy Pilot Study

In our report "Attitudes and Behavior of Personnel Concerning Alcohol and Problem Drinking" we based our primary analysis upon the "Current Problem Typology" which had been used in civilian studies of drinking problems. In the scoring system detailed in Appendix B of that report, we divided the population into five categories as follows:

1. High consequence score (based on problems with wife, relatives, friends or neighbors, on the job, with police, health or injury, and financial problems).

2. Heavy intake or binge drinking, but not a high consequence score.

3. Potential problems only (dependence, loss of control, symptomatic drinking, belligerance).

4. Drank, no problems.

5. Nondrinkers.

The scoring of drinking problems presented in our report of the pilot study was designed to replicate as closely as possible the scoring procedures utilized in our past civilian studies, so as to facilitate comparisons of civilian findings and those for Naval personnel in the final service-wide study which is yet to be conducted. The scoring procedures presented in our pilot study report thus have been legitimated by prior usage with civilians; and they were developed through a consensus of a number of alcohol specialists. However, there is need to re-score the findings to make doubly sure that the scoring procedures are sensitive to those cases where men are demonstrably in serious trouble over their use of alcohol. Accordingly, the primary purpose of this memorandum is to provide a "Serious Consequences Typology" in an attempt to increase the sensitivity of the first two categories of the "Current Problem Typology" in order to estimate the proportion of the population who may be in critical need of help.

As with the report to which this memorandum is a supplement, it is important to remember that the statistics presented are based on a sample of only four installations and cannot be responsibly construed to represent the Navy as a whole.

The New Typology

The new "Serious Consequences Typology" was constructed by re-scoring six of the Problem Drinking Scores described in Appendix B of the report:

Heavy Intake: A "very high" score was defined as "Punch 4": 12 or more drinks per occasion at least weekly or 8 or more daily.

Problems with Wife: A "very high" score was defined as "Score 5": Wife actually left because of respondent's drinking; or "Score 4": Wife got angry or threatened to leave home because of drinking.

Problems with Friends and Neighbors: A "very high" score was defined as "Score 3": Drinking involved losing a friendship or drifting apart from a friend.

Job Problems: A "very high" score was defined as "Score 3": Any two of the following:
Drinking hurt chances for promotion/raise;
People at work said cut down drinking;
Drinking had harmful effect on job and assignment.

Police Problems: A "very high" score was defined as "Score 3": Trouble with police about driving after drinking and other nondriving trouble with police about drinking; or "Score 2": Trouble with police about driving after drinking, or other nondriving trouble. This was the same definition that was used for a "High" score in the report.

Health or Injury Problems: A "very high" score was defined as "Score 3": Had illness connected with drinking which kept respondent from working or regular activities for a week or more, or in a hospital/rest home due to drinking; or "Score 2": Physician suggested respondent cut down on drinking AND: Drinking had harmful effect on health AND/OR Injury to respondent due to his drinking. This was the same definition that was used for a "high" score in the report.

Using these new definitions of "very high" scores, the "Serious Consequences Typology" was constructed in the following way, with mutually exclusive categories:

1A. Critical Conditions: Two or more very high scores in the areas of problems with wife, problems with friends or neighbors, job problems, police problems, health or injury problems;

1B. Very Serious Consequences: A very high score in one of the five areas enumerated above;

1C. Serious Consequences: All other persons classified as "High Consequences" in the "Current Problem Typology."

2A. Very Heavy Intake or Binge: Not eligible for categories 1A, 1B or 1C, but a very high score on Heavy Intake or a high score on binge drinking (stayed intoxicated for several days or went on binge three or more times).

2B. Heavy Intake: All other persons classified as "Heavy Intake" in the "Current Problems Typology."

3. Potential Problems Only (same as "Current Problem Typology").

4. Drank, no problems (same as "Current Problem Typology").

5. Nondrinkers (same as "Current Problems Typology").

Table S-1 (attached), which corresponds to Table 1 in the report, shows the distribution of the "Serious Consequences Typology" separately for questionnaires administered on-site and questionnaires administered by mail. It would appear that on-site administration is slightly more sensitive to the detection of Critical Conditions and Very Serious Consequences. However, we do not view the difference in results with the two methods as being of sufficient consequence to contraindicate the use of the by mail method in the final Navy-wide study (recommended because of its much greater economy and flexibility in sampling and administration).

Table S-2 (attached), which corresponds to Table 2 in the report, shows the proportion achieving a very high score on each of the variables which were re-scored in the construction of the "Serious Consequences Typology." Comparison of results from on-site administration of questionnaires with those obtained by mail again reflects the slightly greater sensitivity for the on-site administration in the detection of very serious problems that was noted above.

Table S-3 (attached), which corresponds to Table 14 in the report, shows the distribution of the "Serious Consequences Typology" separately for junior and senior officers and enlisted men. The results with this sensitive typology show that, with respect to the most serious consequences, there is a greater similarity between the junior and senior enlisted men than had appeared with the "Current Problem Typology" presented in our prior report.

Table S-4 (attached), which corresponds to Table 15 in the report, shows the proportion achieving a very high score on each of the variables which were re-scored in the construction of the "Serious Consequences Typology," separately for the various grade categories. This table confirms, with more stringent criteria, the findings which were revealed by the "Current Problem Typology."

Table S-5 (attached), which corresponds to Table 27 in the report, shows the distribution of the "Serious Consequences Typology" separately for officers and enlisted men, at each of the four sites at which the pilot study was conducted. Findings for the "Critical conditions" category are quite consistent in that the incidence was materially higher for enlisted men than for officers in each of the four installations.

Table S-6 (attached), which corresponds to Table 28, shows the proportion achieving a very high score on each of the re-scored variables, separately for officers and enlisted men at each of the four installations. Again the findings for these re-scored Specific Current Problems are reasonably consistent from one installation to another.

To summarize: we believe the revised method of scoring drinking problems will provide the degree of sensitivity in subgroup comparisons (as well as the "face validity") that will be wanted for the analysis of data to be gathered in the forthcoming full-scale survey of drinking practices in the Navy. Very fortunately, this new method of scoring also can be applied on our drinking-problem data for civilian men of military age, so as to put the findings for Naval personnel and civilians on a comparable basis.

We are looking forward to further discussions of findings on the pilot study and the planning of the full-scale Navy-wide survey.

TABLE S-1

CURRENT DRINKING PRACTICES AND THEIR CONSEQUENCES
BY TYPE OF QUESTIONNAIRE ADMINISTRATION
(OFFICERS AND ENLISTED MEN COMBINED)
(In Percentages)

Serious Consequences Typology (Last three years)	Results	
	By-Mail (N=845)	On-Site (N=758)
Critical Conditions	4	5
Very Serious Consequences	10	13
Serious Consequences	18	14
Very Heavy Intake or Binge	6	6
Heavy Intake	14	13
Potential Problems Only	20	22
Drank, No Problems	26	24
Nondrinkers	3	3
Total[a]	101	100

[a]Totals may vary because of rounding of components.

TABLE S-2

SPECIFIC DRINKING PROBLEMS BY TYPE OF QUESTIONNAIRE ADMINISTRATION (OFFICERS AND ENLISTED MEN COMBINED) (In Percentages)

Specific Current Problems (Last three years)	Results	
	By-Mail (N=845)	On-Site (N=758)
Very heavy intake (4+)	13	16
Major problems with wife (4+)	2	5
Major problems with friends, neighbors (3+)	3	5
Major job problems (3+)	4	4
Police problems (2+)	9	12
Health or injury problems (2+)	2	3

TABLE S-3

CURRENT DRINKING PRACTICES AND CONSEQUENCES BY PAY GRADE CATEGORY[a]

Serious Consequences Typology (Last three years)	Enlisted Men			Officers		
	Total (N=895)	Junior (N=559)	Senior (N=334)	Total (N=708)	Junior (N=455)	Senior (N=251)
Critical Conditions	7	7	7	2	2	2
Very Serious Consequences	14	16	12	7	9	6
Serious Consequences	17	20	13	14	13	15
Very Heavy Intake or Binge	9	8	10	3	3	3
Heavy Intake	13	12	15	13	13	12
Potential Problems Only	16	16	15	27	28	24
Drank, No Problems	20	17	26	32	30	37
Nondrinkers	3	4	3	2	2	2
Total[b]	99	100	101	100	100	101

[a]Data on pay grades were unavailable for two enlisted men and two officers.

[b]Totals may vary because of rounding of components.

TABLE S-4

SPECIFIC DRINKING PROBLEMS BY PAY GRADE CATEGORY[a]
(In Percentages)

Specific Current Problems (Last three years)	Enlisted Men			Officers		
	Total (N=895)	Junior (N=559)	Senior (N=334)	Total (N=708)	Junior (N=455)	Senior (N=251)
Very heavy intake	21	24	18	5	5	4
Major problems with wife	4	2	9	2	2	3
Major problems with friends, neighbors	6	6	5	2	3	1
Major job problems	5	6	5	2	1	2
Police problems	14	17	11	6	6	4
Health or injury problems	4	4	4	1	-[b]	2

[a]Data on pay grades were unavailable for two enlisted men and two officers.

[b]Less than one-half of one per cent.

TABLE S-5

CURRENT DRINKING PRACTICES AND CONSEQUENCES BY LOCALITY
(in Percentages)

Serious Consequences Typology (Last three years)	San Diego			NAS Whidbey Island			Japan			Guam		
	Total (N=468)	EM (247)	Off (221)	Total (N=379)	EM (194)	Off (185)	Total (N=384)	EM (249)	Off (135)	Total (N=371)	EM (203)	Off (168)
Critical Conditions	6	9	1	2	3	1	7	9	3	4	6	2
Very Serious Consequences	11	12	10	13	20	5	10	13	6	11	14	8
Serious Consequences	14	17	11	16	14	18	19	20	16	14	15	12
Very Heavy Intake or Binge	5	7	2	8	13	3	7	9	2	5	6	4
Heavy Intake	12	10	14	14	12	15	15	18	11	12	13	11
Potantial Problems Only	23	18	29	17	13	21	16	12	23	27	22	32
Drank, No Problems	27	22	32	27	21	33	23	17	35	25	20	30
Nondrinkers	2	4	1	3	3	3	3	3	4	3	3	2
Total[a]	100	99	100	100	99	99	100	101	100	101	99	101

[a]Totals may vary because of rounding of components.

TABLE S-6

SPECIFIC DRINKING PROBLEMS BY LOCALITY
(In Percentages)

Specific Current Problems (Last three years)	San Diego			NAS Whidbey Island			Japan			Guam		
	Total (N=468)	EM (247)	Off (221)	Total (N=379)	EM (194)	Off (185)	Total (N=384)	EM (249)	Off (135)	Total (N=371)	EM (203)	Off (168)
Very heavy intake	11	17	5	11	18	4	21	30	4	13	19	6
Major problems with wife	3	4	1	2	4	1	4	5	4	4	4	4
Major problems with friends, neighbors	5	6	3	2	3	2	5	7	1	4	6	2
Major job problems	4	6	1	2	4	1	5	7	2	4	4	3
Police problems	12	16	7	11	16	6	11	13	5	8	12	2
Health or injury problems	3	4	1	2	4	-	3	4	1	2	3	1